REGULAR PLANNING COMMISSION MEETING AGENDA

City Hall - Council Chambers
4381 Broadway, Ste. 201, American Canyon
June 23, 2022
6:30 PM

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

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 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 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:

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.

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: 897 9426 7723 Passcode: 765458

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

MEETING ANNOUNCEMENT

Pursuant to AB 361 this meeting will be held entirely virtually. All methods available for public participation are detailed on the first page of the agenda.

ROLL CALL

PUBLIC COMMENT

*This time is reserved for members of the public to address the City Council/American Canyon Fire Protection District Board on items of interest that are not on the Agenda and are within the subject matter jurisdiction of the City Council/American Canyon Fire Protection District Board. It is recommended that speakers limit their comments to 3 minutes each and it is requested that no comments be made during this period on items on the Agenda. Members of the public wishing to address the City Council/American Canyon Fire Protection District Board on items on the Agenda should comment via email prior to the start of the meeting, or to verbally comment on the item 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. The City Council/American Canyon Fire Protection District Board 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 City Council/American Canyon Fire Protection District Board 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 City Council/American Canyon Fire Protection District Board must be emailed by 3:00 p.m. on meeting day.*

AGENDA CHANGES

CONSENT CALENDAR

Minutes of May 26, 2022
Recommendation: Approve the minutes of May 26, 2022

PUBLIC HEARINGS

Home2Suites Major Modification to revise Condition 40 of Resolution 2020-02 to substitute undergrounding overhead utilities and poles with two relocated overhead utility poles and two additional riser poles across the Project Frontage
Recommendation:

A Resolution of the Planning Commission of the City of American Canyon, California approving a Major Modification to Condition 40 of Resolution 2020-02 for the Home2Suites Design Permit to substitute a utility undergrounding requirement with two relocated overhead utility poles and two additional riser poles across the project Highway 29 frontage at 3701 Main St., APN 059-072-002 (PL22-0007)

BUSINESS

Giovannoni Logistics Center Draft Environmental Impact Report (DEIR) Public Review Workshop
Recommendation: Receive and file Giovannoni Logistics Center DEIR and provide comments on its environmental findings and conclusions.

MANAGEMENT AND STAFF ORAL REPORTS

Active Planning Projects
Recommendation: Review Active Planning Project 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
PLANNING COMMISSION

ACTION MINUTES

May 26, 2022

6:30 P.M. REGULAR MEETING

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

PLEDGE
Chair Mallare led the Pledge of Allegiance.

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

Absent: None

ROLL CALL

PUBLIC COMMENT
Chair Mallare opened public comment. Written Comments: None. Oral Comments: Hugh Marquez oral comment

AGENDA CHANGES
There were no agenda changes.

CONSENT CALENDAR

1. Minutes of March 24, 2022
Action: Motion to approve the consent calendar made by Vice Chair Wong, second by Commissioner Altman and CARRIED by a roll call vote.

BUSINESS

2. Fiscal Year 2022/23 Capital Improvement Program

Action: Adopt a Resolution determining that the FY 2022/23 Capital Improvement Program (CIP) is consistent with the General Plan.

Public Works Director Erica Ahmann Smithies presented a PowerPoint presentation.

Commissioners discussed the item.

Action: Motion to adopt CIP Resolution 2022-02 determining that the FY2022/23 Capital Improvement Program (CIP) is consistent with the General Plan made by Commissioner Goff, Seconded by Commissioner Altman and CARRIED by a roll call vote.

3. Determination of General Plan Conformity For Property Exchange with Napa Valley Unified School District of the Community Center/American Canyon Middle School Gym Property and the Napa Junction Elementary School Site Property.

Action: Adopt a Resolution determining the that the proposed exchange of property between the City of American Canyon ("City") and the Napa Valley Unified School District ("NVUSD") conforms with the City General Plan. The proposed exchange would involve the City transferring approximately 4.6 acres of the City's ownership in the American Canyon Community Center/ACMS Gym Property in exchange for receiving the Nap Junction Elementary School site property from NVUSD. The property received from NVUSD would in turn be used for community and recreation purposes and to supplement vehicle access to the Oat Hill Residential Project and to implement Napa Junction Road as a minor and major collector in furtherance of the Circulation Element for the City General Plan.

Commissioner Goff recused himself from the item as per prior discussion with City Attorney William Ross and left the meeting at 6:57 PM

City attorney William Ross noted that he will text Commissioner Goff when the item is complete so that he can rejoin and participate in the rest of the meeting.

City Attorney William Ross shared a PowerPoint Presentation

Commissioners Discussed the item

Action: Motion to adopt Resolution 2022-03 determining the that the proposed exchange of property between the City of American Canyon ("City") and the Napa Valley Unified School District ("NVUSD") conforms with the City General Plan. The proposed exchange would involve the City transferring approximately 4.6 acres of the City's

ownership in the American Canyon Community Center/ACMS Gym Property in exchange for receiving the Nap Junction Elementary School site property from NVUSD. The property received from NVUSD would in turn be used for community and recreation purposes and to supplement vehicle access to the Oat Hill Residential Project and to implement Napa Junction Road as a minor and major collector in furtherance of the Circulation Element for the City General Plan made by Commissioner Navarro, seconded by Vice Chair Wong and CARRIED by a roll call vote.

Commissioner Goff rejoined the meeting at 7:38 p.m.

MANAGEMENT AND STAFF ORAL REPORTS

4.) Active Planning Projects
Action: Review Active Planning Project List

Associate Planner William He provided an update on active planning projects including the Hotel at Ruins at Watson Ranch application, The Residences at Napa Junction Apartments, pre-application for a car wash at the Fabri site, Home2Suites major modification, Napa Cove lot line adjustment, Fume Cannabis CUP, Giovannoni Logistics Center, Napa Cove grading and building permits issued, PG&E site improvement plans issued, Rough Grading started at Watson Ranch Lot 10 subdivision, Napa Junction 6B building expecting ribbon cutting in June, Canyon Estates, Copart Auto.

Administrative Technician Nicolle Jones announced upcoming events for General Plan Outreach where Commissioner participation is invited including Meet Me in the Streets, Pride pop-up and Juneteenth/Father's Day celebration.

City Attorney Bill Ross an update on the Paoli/Watson Lane annexation.

COMMISSIONER ITEMS

Commissioners reported on items of interest

ADJOURNMENT

The meeting adjourned at 7:39 p.m.

CERTIFICATION

Respectfully Submitted,

_____

Nicolle Jones, Administrative Technician

TITLE

Home2Suites Major Modification to revise Condition 40 of Resolution 2020-02 to substitute undergrounding overhead utilities and poles with two relocated overhead utility poles and two additional riser poles across the Project Frontage

RECOMMENDATION

A Resolution of the Planning Commission of the City of American Canyon, California approving a Major Modification to Condition 40 of Resolution 2020-02 for the Home2Suites Design Permit to substitute a utility undergrounding requirement with two relocated overhead utility poles and two additional riser poles across the project Highway 29 frontage at 3701 Main St., APN 059-072-002 (PL22-0007)

CONTACT

William He, AICP, Associate Planner

BACKGROUND & ANALYSIS

Site Information

General Plan Designation	Downtown Core (DC)
Zoning District	Downtown Core (DC)
Site Size	1.98 Acres
Present Use	Vacant site
Surrounding Zoning and Uses	North: Downtown Core (DC) / AC Chamber of Commerce South: Downtown Core (DC) / Fairfield Inn hotel East: Downtown Core (DC) / Vacant site West: Broadway Residential (BR) / Canyon Cafe
Access	Main St

On January 23, 2020, the Planning Commission reviewed the Home2Suites Design Permit and Minor Variation (File No. PL19-0023). The project consists of a new 4-story, 102-room Home2 Suites hotel with an outdoor pool on a 1.98-acre lot at 3701 Main St in the Downtown Core zoning district. The location map is included as Attachment 3.

The January 23, 2020 staff report discussed applicant requirements to design and construct a variety of public and private improvements in support of the project. Some of the significant improvements include:

- Construct Main Street between S. Napa Junction Road and Antonina Avenue. This improvement includes curb, gutter, sidewalk, and streetlights.
- Construct curb, gutter, and sidewalk across the Highway 29 project frontage.
- Extend a water main across the Highway 29 project frontage.
- Underground two utility poles and approximately 250 feet of overhead wires across the Highway 29 project frontage.

The Planning Commission approval of the Home2Suites project is documented by Resolution 2020-02. Condition 40 requires all existing overhead utilities, both on-site and along project frontages, and all new utilities to serve the project, to be placed underground. Exceptions may be allowed for surface mounted transformers, pedestal mounted terminal boxes and meter cabinets. A photo of the existing overhead utilities across the project frontage is included as Attachment 4. A copy of Resolution 2020-02 is included as Attachment 5.

On July 12, 2020, Napa Valley Hospitality ("Applicant") confirmed agreement to the Design Permit conditions of approval. A copy of the executed Applicant confirmation form is included as Attachment 6.

On April 11, 2022, the Applicant applied for a Major Modification application to change Condition 40, which requires the applicant to underground approximately 250 linear feet of overhead utilities on two poles across the Highway 29 frontage (File No. PL22-0007).

The Applicant coordinated with PG&E over various undergrounding alternatives. Due to technical challenges associated with undergrounding overhead utility lines, the applicant remains committed to underground the overhead utility lines across the project frontage, but the two existing poles will need to be relocated to the north and south property boundaries. Each relocated pole will require a companion Riser pole for a total of four new poles (two replacement poles and two new Riser poles). The plans and photo simulations showing the two poles being removed and four new poles in their relocated places are included in Attachment 7. An illustrative example of the "Before" and "After" appearance of the site as viewed from Highway 29 is included as Attachment 8.

In accordance with the American Canyon Municipal Code (ACMC) Section 19.45.020(B)(7), a major modification is required when a significant change to conditions of approval. The modification is required to be reviewed and approved, conditionally approved, or denied by the original decision-making authority. In this case, the authority is the Planning Commission.

Applicant Justification

Reason for New Poles at the Property Lines

Condition 40 requires the overhead utilities to be placed underground across 250-feet of property frontage. Staff brings the Applicant's explanation to the Commission's attention because we believe there was an expectation that utility undergrounding would necessarily include removing the two existing overhead utility poles.

The existing poles are located within the highway frontage. The northern pole is located approximately 32 feet south of the northern property line. The southern pole is located approximately 57 feet north of the southern property line. The Applicant's proposal would relocate these poles to the north and south property line so that the total overhead utility line undergrounding equals the full 250-feet of property frontage.

Condition 40 suggests that all overhead utilities would be placed underground. So, the expectation is that the undergrounding would include removal of the overhead poles. Unfortunately, if the poles were removed entirely, the overhead utility underground effort would need to be extended to the next pole to the north and south. Extending the overhead utility line underground to the next poles to the north and south would increase the utility underground effort from 250 feet to approximately 720 feet. An illustration that compares the location of the proposed frontage poles with the nearest pole to the north and south is shown in Attachment 9. Since Condition 40 requires undergrounding across the property frontage and not to the next nearest overhead utility pole, a new pole is required at the north and south property line.

Reason for a Companion Line Pole

Staff was surprised to learn that each relocated pole would require an additional companion "Riser Pole." A Riser Pole is just like an ordinary overhead utility pole except the underground utility wires are brought above ground (i.e.: rise) to the top of the pole in conduit mounted to the side of the pole. An illustration of a "Riser Pole" is included as Attachment 10.

The PG&E representative provided an email explanation that due to the amount of equipment on the relocated northern and southern poles, a separate Riser Pole is required for each relocated pole. In the case of the northern pole, the extra equipment includes lines that split off to the west to service two residences located at 3853 Broadway on the west side of Highway 29.

On the southern pole, the extra equipment on the relocated pole includes a transformer that powers a streetlight at Antonina. The PG&E correspondence regarding riser poles is included as Attachment 11.

Revised Condition 40

For reasons stated above, the applicant has requested to change Condition 40 to the following:

“Prior to the issuance of the site improvement plans, the applicant shall provide construction plans

for the undergrounding of the overhead wires and relocation of two utility poles plus two additional riser poles along the Highway 29 frontage. Prior to occupancy, the applicant shall obtain final inspection that confirms the undergrounding and relocated overhead utility poles."

COUNCIL PRIORITY PROGRAMS AND PROJECTS

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

FISCAL IMPACT

The Home2 Suites Major Modification application required a developer's deposit for review and processing, so there is no fiscal impact for staff's time.

ENVIRONMENTAL REVIEW

15304 - The Project is exempt from review under the California Environmental Quality Act ("CEQA") under the Class 4 exemption of minor alterations to land of Section 15304 of Title 14 of the California Code of Regulations and said exemption is not negated by any exception under Section 15300.2 of said Regulations.

ATTACHMENTS:

1. Home2 Suites MM - PC Resolution
2. Home2Suites Plans
3. Home2 Suites MM - Location Map
4. Home2 Suites Frontage
5. PC RESOLUTION 2020-02
6. Home2 Suites - COA confirmation signed
7. Home2Suites Plans and Photosims
8. Overhead Utility Poles Before and After
9. Pole Location Aerial
10. Riser Pole
11. Home2Suites MM - PGE e-mail

RESOLUTION NO. 2022-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, APPROVING A MAJOR MODIFICATION TO CONDITION 40 FOR THE PROPOSED HOME2 SUITES HOTEL DESIGN PERMIT TO SUBSTITUTE A UTILITY UNDERGROUNDING REQUIREMENT WITH TWO RELOCATED OVERHEAD UTILITY POLES AND TWO ADDITIONAL RISER POLES ACROSS THE PROJECT HIGHWAY 29 FRONTAGE AT 3701 MAIN ST, APN 059-072-002 (FILE NO. PL22-0007)

WHEREAS, on January 23, 2020, the Planning Commission approved a Design Permit and Minor Variation (File no. PL19-0023) for development of a 101-room hotel at 3701 Main St (Resolution 2020-02); and

WHEREAS, Condition 40 of Resolution 2020-02 requires two existing overhead utility poles and approximately 250 feet of overhead wires that connect them across the Project Frontage to be placed underground; and

WHEREAS, on July 12, 2020, Napa Valley Hospitality, ("Applicant"), confirmed agreement to the Design Permit conditions of approval; and

WHEREAS, the Applicant coordinated with Pacific Gas & Electric (PG&E) regarding undergrounding the overhead utilities required by Condition 40; and

WHEREAS, the Applicant's preferred alternative addresses cost and technical issues related to overhead utility connections to two homes on the west side of Highway 29 at 3850 Broadway and pole-mounted transformer service to an existing streetlight; and

WHEREAS, although two overhead utility poles are proposed to remain, they would be relocated closer to the north and south property boundary which enables approximately 250 feet of overhead utility lines across the Project Frontage to be placed underground: and

WHEREAS, on April 11, 2022, the Applicant submitted a Major Modification application (File no. PL22-0007) to modify condition #40, to reduce undergrounding costs resulting from technical issues the Applicant encountered with PGE; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on June 23, 2022 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 June 23, 2022; and

NOW THEREFORE BE IT RESOLVED that the American Canyon Planning Commission hereby makes the following CEQA findings and Major Modification permit findings set out in Sections 1 and 2 to approve Major Modification Permit PL22-0007 for the Project, subject to the conditions of approval set out in Section 3.

SECTION 1: CEQA FINDINGS

The proposed Major Modification is exempt from CEQA under Minor Alterations to Land, Class 4 (Section 15304). This exemption is appropriate because the proposed use consists of minor private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. The project site does not affect any waterways, wetlands, or officially designated scenic areas. The project is not located in any officially mapped areas of severe geologic hazard.

SECTION 2: MAJOR MODIFICATION FINDINGS

Approval of the Major Modification Permit requires that all the following findings be made, pursuant to American Canyon Municipal Code Section 19.45.030:

A. The modification is in substantial conformity with the previously approved plan or permit, or if the change is substantive, that the revised project is equivalent to the original project design concept in terms of consistency with city design and development standards and policies.

The Home2 Suites hotel at 3701 Main St is located between Highway 29 and Main St. The site has approximately 250' of frontage on Highway 29. Condition #40 of Design Permit PL19-0023 states, "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." The condition is from the Broadway District Specific Plan (BDSP) Policy 3-4, which says, "Through the discretionary review process, a condition of approval will require existing overhead utility poles on-site and along the property frontage to be placed underground in conjunction with development of the site or as a deferred requirement subject to approval of the City Engineer."

The Applicant worked with PG&E for many months in developing a plan to underground the two utility poles on their western frontage. If the two existing poles were removed entirely, the length of the utility underground would increase from 250 feet to approximately 720 feet which is a much larger utility underground effort that required by Condition 40.

Furthermore, due to information that the northern pole services two residences across the highway and the southern pole services a transformer on Antonina Avenue, the modification includes adding two additional riser poles. The modification reflects technical difficulties and costs associated with undergrounding overhead utilities.

B. The modification will not create impacts substantially different from those of the previously approved project.

The modification changes the outcome from the undergrounding of two utility poles and 250' feet of overhead wires to just the undergrounding the overhead wires. The amendment is a compromise that reflects a more technically accurate representation of undergrounding requirements for Condition 40.

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

The modification will underground overhead utility wires and relocate two utility poles and add two riser poles. There will no detrimental impacts to the property and residents in the vicinity.

D. The proposed modification is consistent with the policies and exhibits contained in the general plan.

The modification represents a better understanding of the technical issues associated with undergrounding overhead utility lines. Although two poles will be added to the relocated poles, approximately 250 feet of overhead wires will be placed underground which will improve aesthetics compared to the overhead utilities today.

The Major Modification is approved subject to the conditions set out in the following section.

SECTION 3. CONDITIONS OF APPROVAL

General

1. The Major Modification Permit approval is granted for the substitution of condition #40 of the Home2 Suites Design Permit at 3701 Main Street in the Downtown Core zoning district. The modification will to relocate the utility poles but still underground overhead wires along the Highway 29 frontage, which shall be substantially 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. Electrical plans prepared by Alfred Benesch & Company from Denver, CO submitted on May 6, 2022, showing existing and relocated utilities.

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. 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 July 5, 2022.

4. This approval shall not be effective until the applicant and property owner execute and return the "Applicant Confirmation of Conditions of Approval" form to the Community Development Department.

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. All remaining conditions of approval from Planning Commission Resolution 2020-02 remain in full force and effect.

7. Prior to the issuance of the Building Permit plans, the applicant shall provide construction plans for the undergrounding of the overhead wires and relocation of two utility poles plus two additional riser poles along the Highway 29 frontage. Prior to occupancy, the applicant shall obtain final inspection that confirms the undergrounding and relocated overhead utility poles.

PASSED, APPROVED AND ADOPTED at a regular meeting of the Planning Commission on June 23, 2022, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Crystal Mallare, Chair

ATTEST:

_____
Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS:

A. Home2 Suites Major Modification Plans
B. Confirmation of Conditions of Approval

EXHIBIT B
Applicant Confirmation of Conditions of Approval
Home2 Suites Major Modification
(FILE NO. PL22-0007)

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 June 23, 2022.

Applicant's signature	Date
Applicant's name	
1st Property Owner's signature	Date
1st Property Owner's name	

This approval shall not be effective until the applicant and property owner execute and return the "Applicant Confirmation of Conditions of Approval" form to the Community Development Department.

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

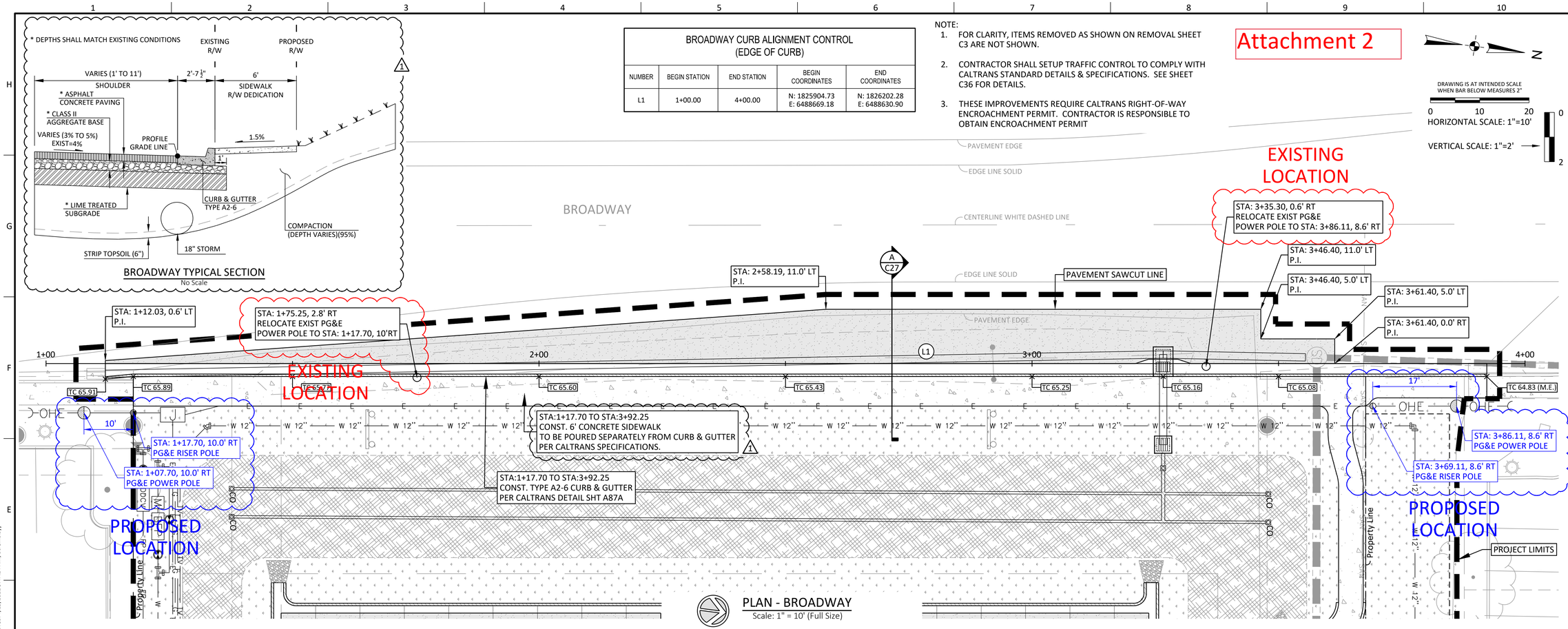
Attachment 2

BROADWAY TYPICAL SECTION
No Scale

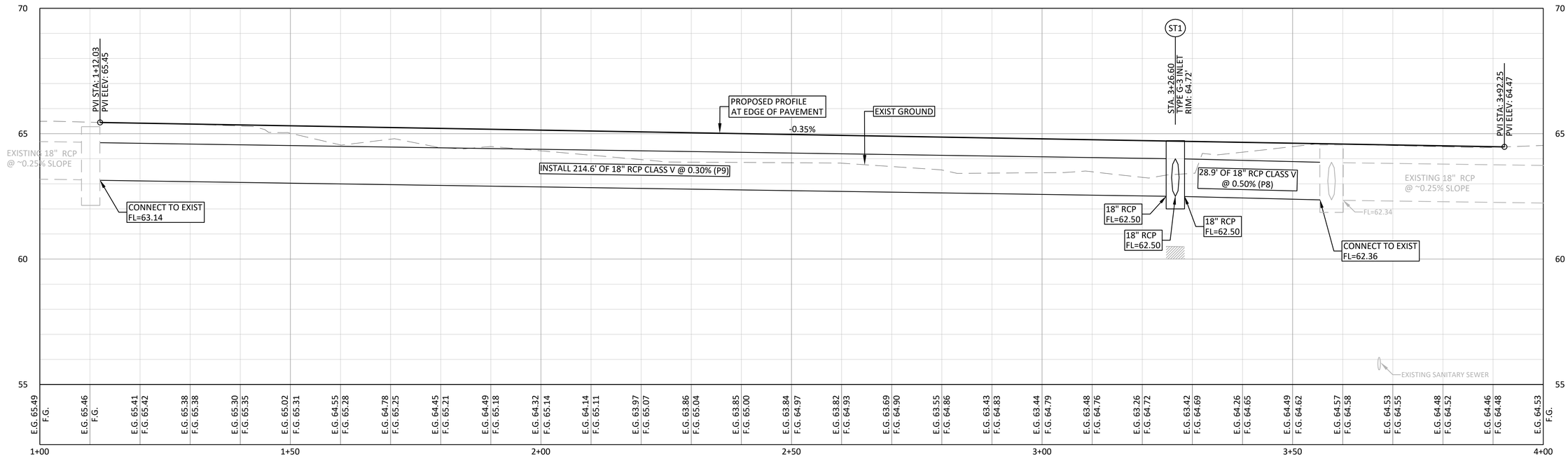
BROADWAY CURB ALIGNMENT CONTROL (EDGE OF CURB)				
NUMBER	BEGIN STATION	END STATION	BEGIN COORDINATES	END COORDINATES
L1	1+00.00	4+00.00	N: 1825904.73 E: 6488669.18	N: 1826202.28 E: 6488630.90

NOTE:
1. FOR CLARITY, ITEMS REMOVED AS SHOWN ON REMOVAL SHEET C3 ARE NOT SHOWN.
2. CONTRACTOR SHALL SETUP TRAFFIC CONTROL TO COMPLY WITH CALTRANS STANDARD DETAILS & SPECIFICATIONS. SEE SHEET C36 FOR DETAILS.
3. THESE IMPROVEMENTS REQUIRE CALTRANS RIGHT-OF-WAY ENCROACHMENT PERMIT. CONTRACTOR IS RESPONSIBLE TO OBTAIN ENCROACHMENT PERMIT

DRAWING IS AT INTENDED SCALE WHEN BAR BELOW MEASURES 2"
0 10 20
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2'
0 2



PLAN - BROADWAY
Scale: 1" = 10' (Full Size)



PROFILE - BROADWAY
Scale: Horz. 1"=10' Vert. 1"=2'

NO.	REVISION #1	DATE
1	REVISIONS	06/29/21

BROADWAY - PLAN & PROFILE

HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

benesch
Alfred Benesch & Company
7979 E. Tufts Avenue, Suite 800
Denver, Colorado 80237
Ph: 303.771.6868 Job No. - 130652.00

QUANTITIES N/A
RECEIPT
REVIEWED BW
BY
DESIGNED BDT
BY
DRAWN BDT
BY

PROJECT HOME2 SUITES
DATE MARCH 26, 2021
SHEET NO. C27

[File Location: Y:\Manhattan\130600S\130652.00_Hotel_California\Eng_Docs\Exhibits\Relocate Broadway PGE Pole\130652DD BROADWAY - PLAN & PROFILE.dwg] [Plot Date: 5/5/2022 1:07:11 PM] [Last Saved: 4/29/2022 9:47:24 AM: Btremblay]

For Visualization Purpose Only

Overhead

Main Pole

Riser Pole

Approx Property Line

Exist.
Maintenance
Road

Approx Property Line

17' +/-

Google Earth

© 2022 Google

For Visualization Purpose Only

Overhead

Riser Pole

Main Pole

Approx Property Line

10' +/-

Google Earth

©2022 Google

Home2 Suites MM – Location Map



Attachment 4

Home2 Suites Hotel Site – Western Frontage



RESOLUTION NO. 2020-02

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, APPROVING A DESIGN PERMIT AND MINOR VARIATION FOR THE DEVELOPMENT OF A NEW FOUR-STORY 102-ROOM HOTEL WITH AN OUTDOOR POOL AND SPA, SUPPORTED WITH 101 PARKING SPACES AND 27,000 SQUARE FEET OF LANDSCAPING ON A 1.98-ACRE LOT AT APN 057-072-002 (FILE NO. PL19-0023)

WHEREAS, a Design Permit and Variance application (File No. PL19-0023) was filed by Napa Valley Hospitality for a new four-story 58,544 square foot hotel ("Project") on a 1.98-acre lot in the Downtown Core zone of the Broadway District Specific Plan at APN 059-072-002; and

WHEREAS, the project is scheduled to be managed by Home2 Suites, a subsidiary of Hilton Hotels brand; and

WHEREAS, the last recorded use for the site was the seasonal fruit stand known as the Strawberry Patch; and

WHEREAS, on October 2, 2018 the City Council approved a zone change amendment to the American Canyon Municipal Code to increase the allowable building height of overnight accommodations and lodging services in the Community Commercial Zoning district to 54 feet and four stories on the east side of Broadway, as set out in City Council Ordinance 2018-07; and

WHEREAS, on June 18, 2019 the City Council approved the Broadway District Specific Plan (BDSP) and certified the Final Environmental Impact Report (EIR) as adequate to address environmental impact aspects with the area within the BDSP, adopted a Statement of Overriding Considerations for the BDSP, and adopted the Mitigation Monitoring and Reporting Program, based on all of the evidence presented, as set out in City Council Resolution 2019-51; and

WHEREAS, on July 9, 2019 the City Council approved the second reading for the BDSP;

WHEREAS, Section 15168(C) of the California Environmental Quality Act (CEQA) provides that for projects within an area with a certified programmatic EIR, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR; and

WHEREAS, staff prepared an environmental checklist that confirms the proposed Home2 Suites Project is within the planning area for the BDSP Final EIR and will have no new significant environmental effects nor substantially increase the severity of previously identified significant effects, and no new mitigation measures are required beyond those identified in the BDSP FEIR and, as such, the City of American Canyon (City) can approve the Home2 Suites Project as being within the scope of the BDSP covered by its EIR and no new environmental document is required; and

WHEREAS, Section 15332 of the California Environmental Quality Act provides that in-fill development projects that meets the conditions described as Class 32 projects are categorically exempt; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on January 23, 2020 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 has considered all of the written and oral testimony presented at the public hearing in making its decision; and

NOW THEREFORE BE IT RESOLVED that the American Canyon Planning Commission hereby makes the following CEQA findings, Minor Variation findings, and Design Permit findings to approve Design Permit (PL19-0023) for the Home2 Suites hotel project subject to the conditions set out in Section 2.

SECTION 1: FINDINGS

A. CEQA Findings

Pursuant to CEQA Guidelines Section 15168(C-4), use with later activities, later activities the program must be examined in the light of the program EIR to determine an additional environment document must be prepared. Where the later activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR.

Staff reviewed the project with a written checklist and evaluated the site and operation. The checklist determined that, with the mitigation measures prescribed, the project's environmental effects were within the scope of the program EIR. There are no substantial changes in the project that would increase the severity of environmental impacts or result in new ones because the Home2 Suites hotel is a type of use that was evaluated in the EIR and there are no characteristics of this use that would increase any of the evaluated impacts or result in new ones.

Additionally, the proposed project meets CEQA Guidelines Section 15332 criteria, in-fill development projects, for an exemption for the following reasons:

1. The proposed commercial end uses of the building are consistent with the existing General Plan and Zoning of "Community Commercial."
2. The 1.98-acre parcel is within the American Canyon city limits and is surrounded by commercial uses.
3. The project site has been previously graded and is in a disturbed state. It does not contain natural habitat suitable for endangered, rare or threatened species. Refer to Exhibit A.
4. Traffic, noise, air quality, and water quality impacts were evaluated in the BDSP EIR. Applicable mitigation measures from that project would be carried forward by this project. The proposed project is within the footprint evaluated in the BDSP EIR and would not result in new or more severe impacts disclosed in that document.
5. The proposed project would be served by the City of American Canyon with potable water and wastewater service. The project would discharge runoff into a new stormwater basin located on the west side of the parcel. Additionally, Marin Clean Energy and Pacific Gas and Electric Company

would provide electricity and natural gas service from existing infrastructure. Utilities are stubbed out to serve the parcel.

B. Minor Variation Findings

This project required a Minor Variation to reduce the number of required parking spaces from 112 spaces to 101. Approval of the Minor Variation requires that all of the following findings be made, pursuant to American Canyon Municipal Code Section 19.44.030:

1. The granting of the minor variation will not be materially detrimental to the public health, safety, or welfare, or to property or residents in the vicinity.

The reduction of parking spaces do not materially effect the public health, safety, or welfare of the property or residents in the vicinity. In accordance to Hilton Hotel's management, 101 parking spaces for the 102-room hotel is acceptable. Based on historical data and site-specific demand, a parking and room ratio of 1:1 is feasible due to the lack of significant meeting space and food and beverage are only provided to guests for breakfast.

2. The granting of the minor variation will not result in any inconsistencies with the general plan.

Granting the minor variation will not result in any inconsistencies with the General Plan. The reduction in required parking does not change the use, height, or bulk of the hotel. In accordance to the General Plan guidelines, the applicant provided a high-quality lodging facility in the Downtown Core zone.

3. The minor variation does not exceed the maximum waiver permitted by this chapter, or allow a use or activity that is not otherwise expressly authorized by the regulations governing the subject parcel.

According to ACMC Section 19.44.020, the maximum waiver for the number of parking spaces is ten percent. The applicant is reducing their total parking spaces from 112 to 101, which is approximately ten percent.

4. Either of the following:
    a. The minor variation will promote uniformity in development on the lot or in the area.
    b. The minor variation will alleviate an unreasonable hardship on the property owner or applicant that would result from strict application of the requirements of this title.

The minor variation will alleviate an unreasonable hardship on the property owner. Due to the landscape setbacks and the size of the building footprint, the parking and circulation area is limited. The strict application of the Parking Code will require the project to reduce the number of rooms, which makes it financially infeasible.

C. 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:

1. 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 hotel complies with the height, bulk, and setbacks regulations that apply to the project site. There are no other applicable approvals required for the proposed project.

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

The project is within the BDSP and required to comply with the development standards and policies for parcels in the Downtown Core zone. In accordance to Table 2-5: Downtown Core Development Standards, the project complies with all standards.

Downtown Core Zone Dev. Standards	Required	Provided
Minimum lot size	1 acre	1.98 acre
Minimum Lot width	200 feet	250 feet
Minimum Lot Depth	100 feet	345 feet
Min. building setback from Broadway	30 feet	70 feet
Min. rear yard setback	10 feet	19.4 feet
Minimum side yard setback	10 feet	10 feet
Number of Stories	4 stories	4 stories
Maximum Height	54 feet when set back from a Public ROW	51 feet*

Note 1: The total height of the building plus rooftop equipment is 55 feet, whereas the rooftop is 51 feet with 4 feet of equipment. ACMC Section 19.10.090 permits rooftop equipment to be up to 10 feet of projections above the main roof.

Additionally, the project complies with urban design policies required in Chapter 3 of the BDSP:

- *Policy 3-9: Orientation – The project's primary building façade faces north and will have a port cochere on the west side as well as an east entry leading into future Main Street. All entries have transparent building elements with lights.*
- *Policy 3-10: Setbacks – The project's foot print is within the setbacks.*
- *Policy 3-11: Trash Enclosure – The project's trash enclosure is located on the north side, but screened from view with landscaping.*
- *Policy 3-12: Architecture – The project's design consists of Modern Industrial and Napa Valley aesthetics. The façade consists of red, white, and grey, which is wrapped in a stone wainscot on the first floor. The windows and entries are recessed o show articulation, and the bold white trim separates the floors and suites, which reduces the boxy footprint.*
- *Policy 3-13: Height – The proposed building is one story taller than the Fairfield Inn next door, but is set back from the highway by more than 100 feet. The building will be approximately 90' away from the Fairfield Inn on the south side.*
- *Policy 3-14: Minor Variations – The applicant has applied for a minor reduction in required parking spaces.*
- *Policy 3-15: Pedestrian Connections – The project provides offsite improvements on future Main Street that facilitates pedestrian connections parallel to Broadway St. The project also includes a pedestrian path from the hotel to Broadway St through the western landscaped area. These connections create a porous site that creates new opportunities for walking and biking throughout the area.*

3. The project and its design comply with all applicable general plan policies.

The project complies with all applicable general plan policies because the proposed use is included in the Downtown Core designation within the BDSP; 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.

4. 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 E-Zone and lodging uses are a permitted use in this zone.

5. 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 and perimeters. Additionally, the building is detailed with appropriate windows, doors, and a roofline with a parapet to screen roof level installations.

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

The project is compatible with existing development in the area as it is set back from Broadway and built with similar materials. The exterior design, colors, and materials have a modern aesthetic but the landscaped setbacks harmonize with surrounding developments. The stone wainscot matches the Napa Valley aesthetic found in many of the City's commercial buildings. There are no residential

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

The project avoids repetition with the use of architectural features around entrances, the sleek tower in the southwest corner, and a variation in elevation treatment with the thick white trims. The windows and doors are all recessed to give articulation to the floors and the site also has many landscaped areas which create separation and interest in the design.

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

The site maintains a 26 feet drive aisle and striped crossings for all pedestrian access ways. The site provides five ADA access parking spots on the north side, directly adjacent to the entrance. The site also includes adequate parking lot lighting that illuminates the site equally with at least a one-foot candle of light.

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

SECTION 2. CONDITIONS OF APPROVAL

General

1. The Design Permit and Minor Variation approval is granted for a new four-story 102-room hotel with 101 parking spaces and 27,000 square feet of landscaping on a 1.98-acre lot at APN 057-072-002, 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 Bieberly Architects from Salina, KS, dated July 9, 2018 consisting of seven sheets, including Proposed Site Plan, Floor Plan, elevations, and Roof Plan.
b. Photometric plans prepared by BK Consulting Engineers Inc from Montclair, CA, dated June 20, 2019 consisting of one sheet, showing proposed lighting and site photometric plan.
c. Landscaping Plans prepared by Yadav Design Group from Fremont, CA, dated January 2, 2020, consisting of two sheets, showing the proposed landscaping and planting plan.
d. Civil plans prepared by Alfred Benesch & Company from Manhattan, KS, dated December 31, 2019, consisting of twelve sheets showing grading, utilities, and stormwater quality control.
e. Topographic Surveys prepared by St. John Land Consulting from Benicia, CA, dated September 7, 2018, consisting of three sheets, showing the surveyed lands of the project site.

2. The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected 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 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 (10) 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 $697. 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 February 3, 2020.

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 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. The Applicant acknowledges that it has been informed of the settlement of the litigation involving the BDSP subject to confirmation by the Napa Superior Court.

9. The site plan identifies 101 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.

10. 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.

11. 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.

12. 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.

13. The applicant shall relocate the trash enclosure from the north-east corner to the south-west corner of the site. The new location provides easier access for trash and recycling collection vehicles. Ensure that the trash enclosure maintains a slope so rain water will be guided to landscaped areas.

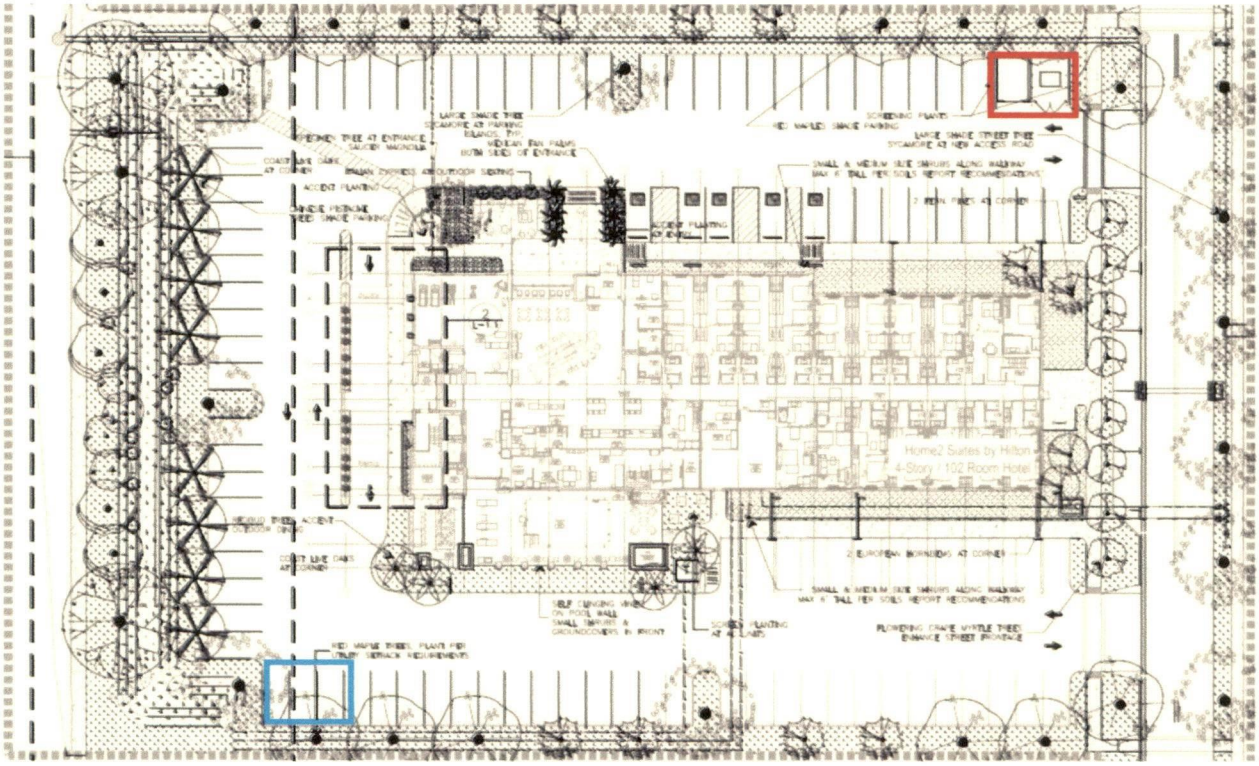


Figure 1: Relocate the trash enclosure from the northeast corner as shown in red to the southwest corner as shown in blue.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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

19. Project shall comply with current adopted codes and standard Building Division conditions for approval.

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.

Fire Protection

The following Fire Protection conditions shall be satisfactorily addressed prior to building permit issuance:

21. 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.

22. 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. A building permit (BP19-0499) for this project has been submitted on December 2, 2019 and is currently under review for approval under the 2016 California Building Standard Codes.

23. 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.

24. 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 one (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.

25. 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.

26. 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.

27. 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.**

<u>BUILDING FIRE FLOW REQUIREMENTS – CFC TABLES B105.2 & B105.1(2)</u>

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

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

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

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, 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.

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 address existing downstream storm drain facilities and hydraulic conditions which may impact the design of proposed facilities and improvements.

44. 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.

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 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.

47. 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.

48. 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.

49. 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.

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 an approved SWPPP and Erosion and Sediment Control Plan 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 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.

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 (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.

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

61. 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

62. The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans titled "Development Plan Home2 Suites Hotel, American Canyon, CA" prepared by Alfred Benesch & Company, dated December 2019 (Preliminary Plans), except as modified by these conditions.

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

64. 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. Main Street Extension:

Main Street as a public street within the existing 50-foot wide right-of-way from the existing street stub just north of Antonina Avenue to South Napa Junction Road. Along the frontage of the site, the curb-to-curb street width shall be 32-feet where parking is provided and 24-feet where the landscape areas bulb out on either side of the driveways. A 6-foot wide sidewalk shall be provided along the frontage contiguous to the back of curb where on-street parking is provided and continuing along that same alignment north and south of the on-street behind the landscape bulb-outs. The landscape bulb outs shall be 7-feet wide including the curb width. North of the project frontage, the curb-to-curb street width shall be 24-feet with no sidewalks on either side. South of the project frontage extending to Antonina Avenue, the curb-to-curb street width shall be 24-feet. On the west side, provide a 6-foot wide sidewalk and landscape strip 7-feet wide including the curb width. Sidewalk is not required on the east side. Associated street improvements shall include curb and gutter along both sides, drainage improvements, streetlights and striping and signage. All 24-foot wide sections shall be signed "Fire Lane – No Parking."

In addition to runoff from the roadway, the associated drainage improvements shall convey the runoff from the upland properties east of the Main Street extension. Grading and drainage shall be designed to prevent ponding on these properties.

b. Water Main Extension:

A new 12-inch diameter water main from the end of the existing 12-inch water main in State Route 29 just south of the subject site, north along its frontage to the Weber Street right-of-way, then east within that right-of-way to the Main Street (Central Avenue) right-of-way, then north within that right-of-way and connecting to the existing 6-inch water main in South Napa Junction Road. The final alignment shall be as approved by the City Engineer.

c. State Route 29 Frontage Improvements:

Curb, gutter and sidewalk along the State Route 29 frontage and extending to the north to connect to the existing curb, gutter and sidewalk. The existing roadside drainage ditch shall be replaced with and underground storm drain. The existing pavement shall be widened as necessary to match. Note that a portion of the existing pavement may have to be reconstructed to approximate the cross-slope and avoid creating an unacceptable hinge-point.

65. 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.

66. 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 (ESCP)
iv. Drainage Report
v. Post-Construction Stormwater Control Plan (SWCP)
vi. Geotechnical Report
vii. Construction Traffic Control Plan.

67. 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.

68. 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. Irrevocably offer for dedication to the City, a public utility easement along the State Route 29 frontage as necessary to accommodate the joint trench improvements. Applicant shall prepare the legal description, plat and deed and submit them to the City for review.

d. Subject to the terms of Condition 47, 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).

69. 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

70. 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.

71. 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 AutoCAD (.dwg) and (.shp) format (void of any AutoCAD block formats preventing full editing capabilities of the drawings), 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 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.

Mitigation Measures

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 (BAAQMD) phone number shall also be visible to ensure compliance with applicable regulations.

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.

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.

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 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.

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.

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 15064.5(d)).

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.

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.

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 postconstruction 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.

MM NOI-1: Prior to issuance of building permits of noise sensitive land uses within the 65 dBA Ldn (Day-night average sound level) roadway noise contours shown in Exhibit 3.9 4 or within the 65 dBA Ldn roadway noise contours specified in Table 3.9 15 (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.

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.

PASSED, APPROVED AND ADOPTED at a regular meeting of the Planning Commission on January 23, 2020, by the following vote:

AYES: Commissioner Altman, Commissioner Mallare, Commissioner Wong, Vice Chairman Navarro, Chairman Goff

NOES: None

ABSTAIN: None

ABSENT: None

Andrew Goff, Chair

ATTEST:

Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

William D. Ross, City Attorney

CITY OF AMERICAN CANYON
COMMUNITY DEVELOPMENT DEPARTMENT

Applicant Confirmation of Conditions of Approval
Design Permit and Minor Variation Permit for Napa Valley Hospitality, LLC at APN 057-072-002 (File No. PL 19-0023)

As shown by my signature below, I confirm that I understand and agree to abide by the conditions of approval included in the Design Permit and Minor Variation approval PL19-0023 dated January 23, 2020.

Applicant's signature

07/12/20
Date

MOHD KARIM SAYANI (NAPA Valley Hospitality)
Applicant's name printed

Property Owner's signature

07/12/20
Date

MOHD KARIM SAYANI
Property Owner's name printed

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

Law Offices of
William D. Ross
A Professional Corporation

RECEIVED
JAN 23 2020
City of American Canyon
Community Development

File No.199/6.57

VIA ELECTRONIC TRANSMISSION

TO: Brent Cooper, Planning Director **DATE:** January 23, 2020

FROM: William D. Ross, City Attorney **CC:** William He, Associate Planner

RE: *California Clean Energy Committee v. City of American Canyon*, Napa County Superior Court Case No. 19CV001013; January 23, 2020 Planning Commission Public Hearing 4.1., Draft Resolution

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Based on the Council approved settlement of the above entitled litigation on January 21, 2020, the condition in the draft Resolution for the Project, in Section 2, No. 8, should be modified to read as follows:

8. The Applicant acknowledges that it has been informed of the settlement of the litigation involving the BDSP subject to confirmation by the Napa Superior Court.

You have been copied on a transmittal to Mr. Karim Sayani, the Project Representative concerning that matter.

W.D.R.

Attachment 2

DEVELOPMENT PLAN
HOME2 SUITES HOTEL
AMERICAN CANYON, CA

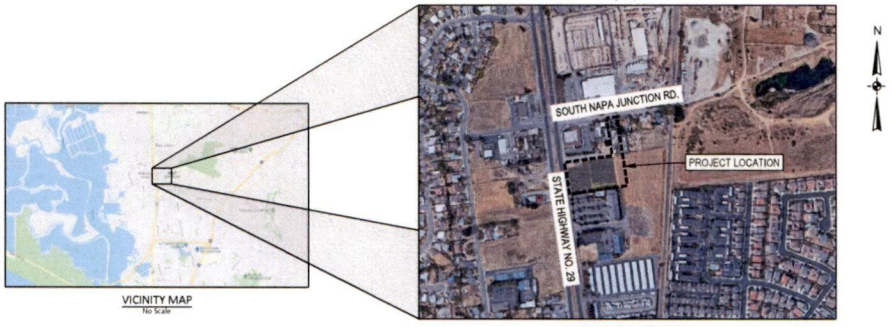
Preliminary Development Plan for

HOME2 SUITES HOTEL

Benesch PO# 00130652.00

SHEET INDEX

C1 - TITLE SHEET
T5-1 - PLAN - SURVEY
T5-2 - PLAN - SURVEY
T5-3 - PLAN - SURVEY
C2 - GENERAL NOTES & VICINITY MAP
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C4 - CROSS SECTION - SITE
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C6 - PLAN - GRADING
C8 - PLAN - PAVEMENT MARKING
C9 - PLAN - TURNING MOVEMENT
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A2.04 - FOURTH FLOOR PLAN
A2.05 - ROOF PLAN
A5.02 - EXTERIOR ELEVATIONS



VICINITY MAP
No Scale

PROJECT LOCATION MAP
No Scale

PROJECT CONTACTS

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Ph: 816.421.1211
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Email: neelu@yadavdesign.com

DEVELOPMENT PLAN

NOT FOR CONSTRUCTION

TITLE SHEET

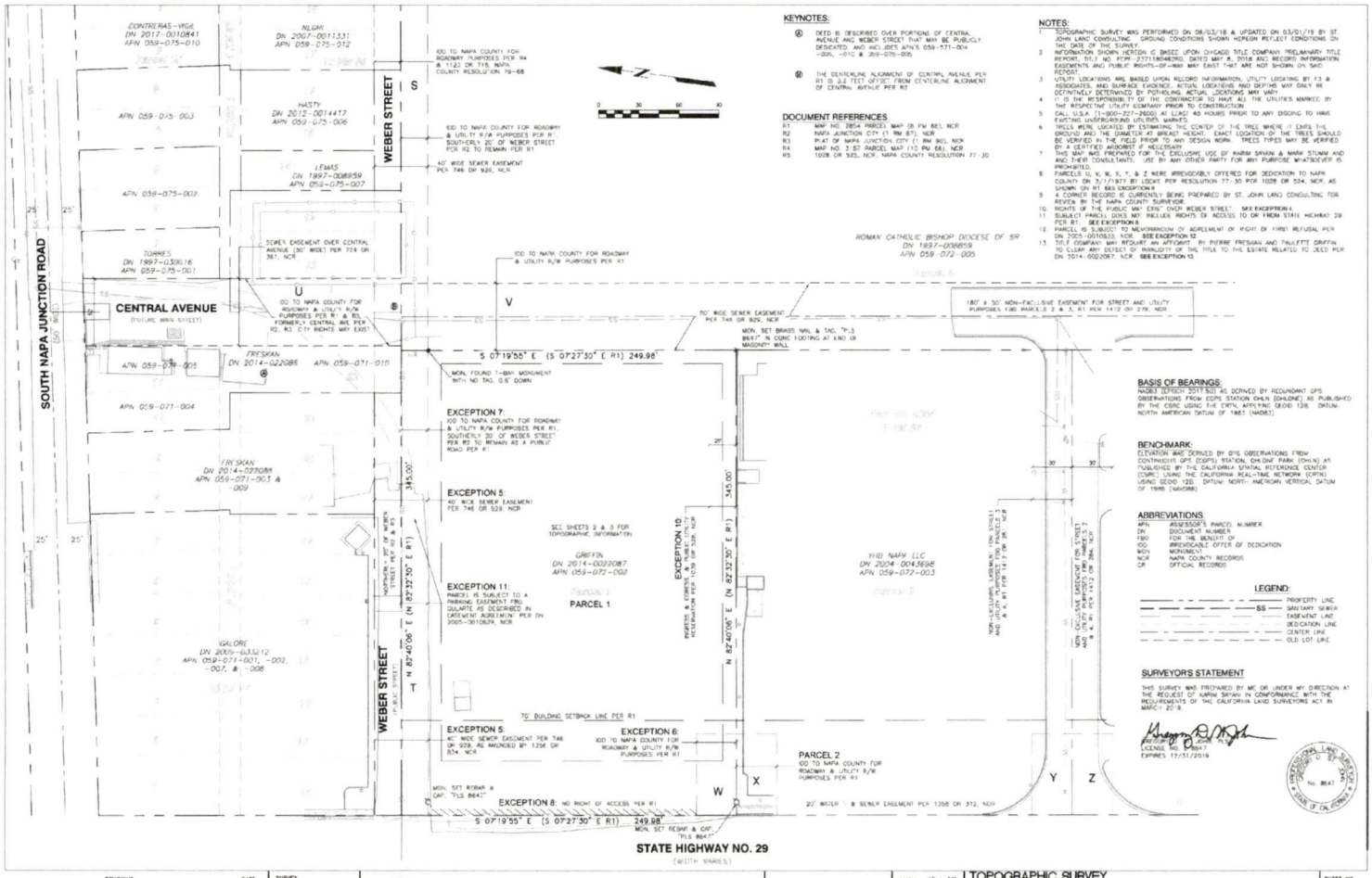
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

benesch

PROJECT: HOME2 SUITES

DATE: DECEMBER 2019

SHEET NO.: C1



KEYNOTES:

Ⓐ DEED IS DESCRIBED OVER PORTIONS OF CENTRAL AVENUE AND WEBER STREET THAT MAY BE PUBLICLY DEDICATED, AND INCLUDES APN'S 059-571-004, -005, -010 & 269-075-005

Ⓑ THE CENTERLINE ALIGNMENT OF CENTRAL AVENUE PER R1 IS 2.2 FEET OFFSET FROM CENTERLINE ALIGNMENT OF CENTRAL AVENUE PER R2

DOCUMENT REFERENCES:

R1 MAP NO. 2854 PARCEL MAP (8 PM 66), NCR
R2 NAPA JUNCTION CITY (1 RM 87), NCR
R3 PLAT OF NAPA JUNCTION CITY (1 RM 80), NCR
R4 MAP NO. 3 67 PARCEL MAP (10 PM 66), NCR
R5 1028 OR 525, NCR, NAPA COUNTY RESOLUTION 77-30

NOTES:

1. TOPOGRAPHIC SURVEY WAS PERFORMED ON 08/03/18 & UPDATED ON 03/01/19 BY ST. JOHN LAND CONSULTING. GROUND CONDITIONS SHOWN HEREON REFLECT CONDITIONS ON THE DATE OF THE SURVEY.
2. INFORMATION SHOWN HEREON IS BASED UPON CHICAGO TITLE COMPANY PRELIMINARY TITLE REPORT, TITLE NO. FCPV-2371180482RO, DATED MAY 8, 2018, AND RECORD INFORMATION. EASEMENTS AND PUBLIC RIGHTS-OF-WAY MAY EXIST THAT ARE NOT SHOWN ON SAID REPORT.
3. UTILITY LOCATIONS ARE BASED UPON RECORD INFORMATION, UTILITY LOCATING BY F3 & ASSOCIATES, AND SURFACE EVIDENCE. ACTUAL LOCATIONS AND DEPTHS MAY ONLY BE DEFINITIVELY DETERMINED BY POTHOLING. ACTUAL LOCATIONS MAY VARY.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL THE UTILITIES MARKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
5. CALL U.S.A. (1-800-227-2600) AT LEAST 48 HOURS PRIOR TO ANY DIGGING TO HAVE EXISTING UNDERGROUND UTILITIES MARKED.
6. TREES WERE LOCATED BY ESTIMATING THE CENTER OF THE TREE WHERE IT ENTERS THE GROUND AND THE DIAMETER AT BREAST HEIGHT. EXACT LOCATION OF THE TREES SHOULD BE VERIFIED IN THE FIELD PRIOR TO ANY DESIGN WORK. TREES TYPES MAY BE VERIFIED BY A CERTIFIED ARBORIST IF NECESSARY.
7. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF KARIM SAYANI & MARK STUMM AND THEIR CONSULTANTS. USE BY ANY OTHER PARTY FOR ANY PURPOSE WHATSOEVER IS PROHIBITED.
8. PARCELS U, V, W, X, Y, & Z WERE IRREVOCABLY OFFERED FOR DEDICATION TO NAPA COUNTY ON 3/1/1977 BY LOCKE PER RESOLUTION 77-30 FOR 1028 OR 534, NCR, AS SHOWN ON R1 SEE EXCEPTION 8
9. A CORNER RECORD IS CURRENTLY BEING PREPARED BY ST. JOHN LAND CONSULTING FOR REVIEW BY THE NAPA COUNTY SURVEYOR.
10. RIGHTS OF THE PUBLIC MAY EXIST OVER WEBER STREET. SEE EXCEPTION 4
11. SUBJECT PARCEL DOES NOT INCLUDE RIGHTS OF ACCESS TO OR FROM STATE HIGHWAY 29 PER R1. SEE EXCEPTION 8
12. PARCEL IS SUBJECT TO MEMORANDUM OF AGREEMENT OF RIGHT OF FIRST REFUSAL PER DN 2005-0010833, NCR. SEE EXCEPTION 12
13. TITLE COMPANY MAY REQUIRE AN AFFIDAVIT BY PIERRE FRESKAN AND PAULETTE GRIFFIN TO CLEAR ANY DEFECT OR INABILITY OF THE TITLE TO THE ESTATE RELATED TO DEED PER DN 2014-0022087, NCR SEE EXCEPTION 13

BASIS OF BEARINGS:
NAD83 (EPOCH 2017.50) AS DERIVED BY REDUNDANT GPS OBSERVATIONS FROM CORS STATION CHLN (CHLONE) AS PUBLISHED BY THE CSRC USING THE ORTN, APPLYING GEOID 12B. DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)

BENCHMARK:
ELEVATION ARE DERIVED BY GPS OBSERVATIONS FROM CONTINUOUS GPS (CGPS) STATION, CHLONE PARK (CHLN) AS PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC, USING THE CALIFORNIA REAL-TIME NETWORK (CRTN) USING GEOID 12B. DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

ABBREVIATIONS:

APN	ASSESSOR'S PARCEL NUMBER
DN	DOCUMENT NUMBER
FBO	FOR THE BENEFIT OF
IOD	IRREVOCABLE OFFER OF DEDICATION
MON	MONUMENT
NCR	NAPA COUNTY RECORDS
OR	OFFICIAL RECORDS

LEGEND:

PROPERTY LINE
SS SANITARY SEWER EASEMENT LINE
DEDICATION LINE
CENTER LINE
OLD LOT LINE

SURVEYOR'S STATEMENT

THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF KARIM SAYANI IN CONFORMANCE WITH THE REQUIREMENTS OF THE CALIFORNIA LAND SURVEYORS ACT IN MARCH 2019.

LICENSE NO. 8647
EXPIRES 12/31/2019

REVISIONS
ADDITIONAL ACCESS & UTILITY EASEMENT RESEARCH
TOPO CENTRAL AVE. & BOUNDARY SURVEY 1 IN 87

DATE
10/08/18
03/03/19

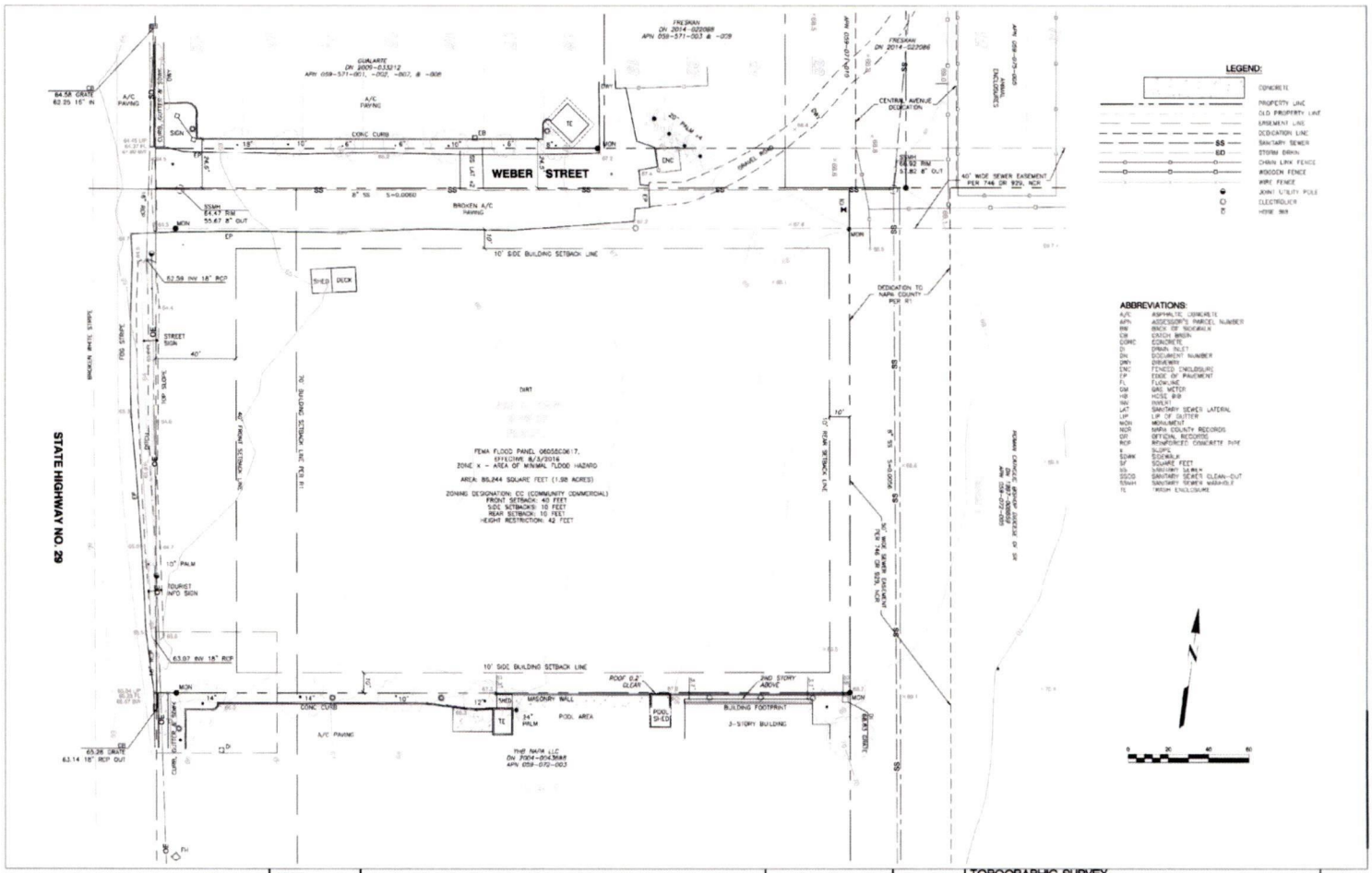
SURVEY
drawn: GSTJ
job no. 201838
dwg. Antonio_Ave_Topo.dwg

ST. JOHN LAND CONSULTING
BENICIA, CA 94510 707.392.6789

scale: 1" = 30'
drawn: GSTJ
checked: GSTJ
date: 08/07/18

TOPOGRAPHIC SURVEY
LANDS OF GRIFFIN AND FRESKAN, TRUSTEES
APN 059-072-002, DN 2014-0022087, NCR
VACANT LAND, AMERICAN CANYON, CA 94503
PROJECT NO. 201838

SHEET NO.
TS-1
OF: 3



REVISIONS:
ADDITIONAL ACCESS AND UTILITY RESEARCH
TOPO CENTRAL AVE. & BOUNDARY SURVEY 1 in 87

DATE
10/08/18
03/05/19

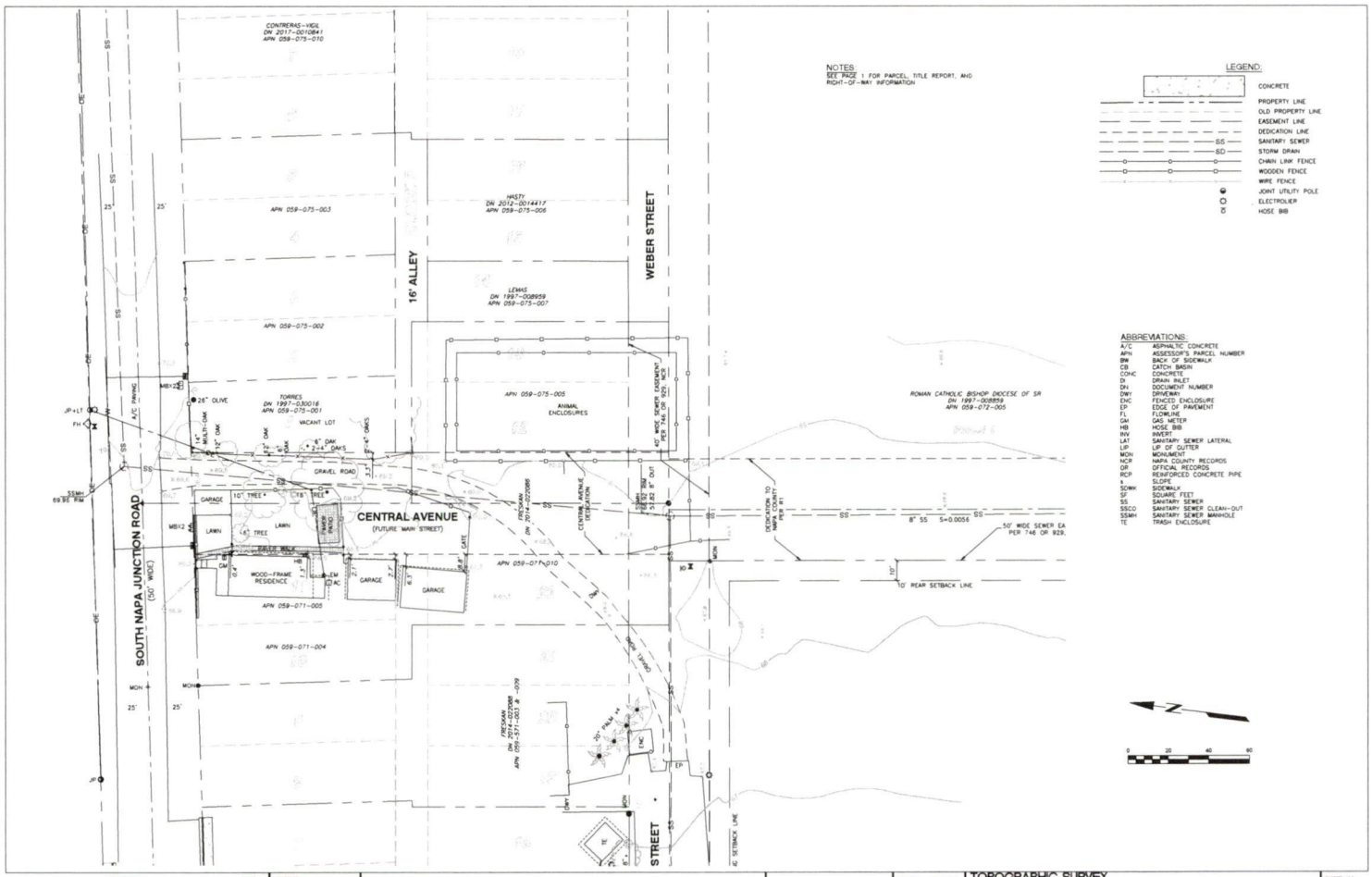
SURVEY
drawn: GSTJ
Job no. 201838
Dwg: Antonino_Ave_Topo.dwg

ST. JOHN LAND CONSULTING
BENICIA, CA 94510 707.392.6789

scale: 1" = 10'
drawn: GSTJ
checked: GSTJ
date: 9/7/18

TOPOGRAPHIC SURVEY
LANDS OF GRIFFIN AND FRESKAN, TRUSTEES
APN 059-072-002, Dn 2014-0022087, NCR
VACANT LAND, AMERICAN CANYON, CA 94503
PROJECT NO. 201838

SHEET NO.
TS-2
OF: 3



REVISIONS	DATE	SURVEY
1 ADDITIONAL ACCESS AND UTILITY RESEARCH TOPO CENTRAL AVE. & BOUNDARY SURVEY 1 W 87	10/08/18 03/05/19	drawn: GST/ job no. 201838 dwg: Antonia_Ave_Topo.dwg

ST. JOHN LAND CONSULTING
BENICIA, CA 94510 707.392.6789

scale:	1" = 10'
drawn:	GST/
checked:	GST/
date:	9/7/18

TOPOGRAPHIC SURVEY
LANDS OF GRIFFIN AND FRESKAN, TRUSTEES
APN 059-072-002, DN 2014-0022087, NCR
VACANT LAND, AMERICAN CANYON, CA 94503
PROJECT NO. 201838

SHEET NO. TS-3 OF: 3



VICINITY MAP
Scale: 1" = 100' (Full Size)

N

0 20 40
HORIZONTAL SCALE: 1"=20'

GENERAL NOTES

1. ALL DISPOSAL SITES MUST BE APPROVED BY THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A CALIFORNIA STATE BOARD OF FOOD & AGRICULTURAL PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY THEIR CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS WORK AS IT IS CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS APPLICABLE TO CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND PAY THE REQUIRED FEES.
4. CONTRACTOR SHALL ABIDE BY OSHA STANDARDS FOR ALL AREAS OF CONSTRUCTION.
5. CONTRACTOR SHALL COMPLETE ALL NECESSARY PERMITS AND INSPECTIONS PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO CDPH NOI PERMIT, CITY PERMITS, CDPH UTILITY PERMITS.
6. THE CONTRACTOR SHALL AT ALL TIMES MINIMIZE MUD AND OTHER CONSTRUCTION DEBRIS ON PUBLIC ROADWAYS USED FOR CONTRACTOR HAULING OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE REMOVAL AND CLEANING OF MUD AND DEBRIS FROM PUBLIC ROADWAYS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL THE GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
8. AFTER COMPLETION OF PROJECT CONTRACTOR SHALL RE-ESTABLISH STAGING, STOCKPILE AREA, AND HAUL ROUTES IN THE CONDITION THAT IT WAS PRIOR TO CONSTRUCTION. THIS INCLUDES, BUT NOT LIMITED TOO, ANY PAVEMENT, CURB, PAVEMENT MARKINGS, AND TURF.
9. THE LOCATIONS OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAVE BEEN OBTAINED FROM EXISTING RECORDS AND FIELD SURVEYS. THE OWNER DOES NOT ASSUME ANY RESPONSIBILITY WITH RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. CONTRACTOR SHALL VERIFY AND CONFIRM ALL PIPE LOCATIONS & SIZES PRIOR TO CONSTRUCTION AND MATERIAL PURCHASE.

SPECIFICATIONS

1. ALL SPECIFICATIONS SHALL COMPLY WITH THE CITY OF AMERICAN CANYON STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED IN THESE PLANS. SHOULD NO SPECIFICATION BE REFERENCED, THEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION MANUAL WILL APPLY.

DEMOLITION NOTES

1. ALL SURFACE PAVING IN DIRECT CONFLICT WITH PROPOSED IMPROVEMENTS SHOULD BE REMOVED AND DISPOSED OF OFF-SITE.
2. WHERE DEMOLITION IS ONLY PARTIAL, NEATLY SAWCUT AND REMOVE PORTIONS SO INDICATED. AT CONCRETE PAVEMENTS AND WALKS, REMOVE AT EXISTING JOINTS WHERE POSSIBLE.
3. EXTENT OF CUTTING AND PATCHING REQUIRED FOR NEW UTILITY, MECHANICAL, PLUMBING, OR ELECTRICAL INSTALLATION IS NOT SHOWN.
4. FOLLOWING DEMOLITION OF SITE IMPROVEMENTS, FILL AND RE-GRADE LOW SPOTS TO PROVIDE POSITIVE DRAINAGE UNTIL FINAL GRADING IS COMPLETE.

NO.	REVISIONS	DATE

DEVELOPMENT PLAN

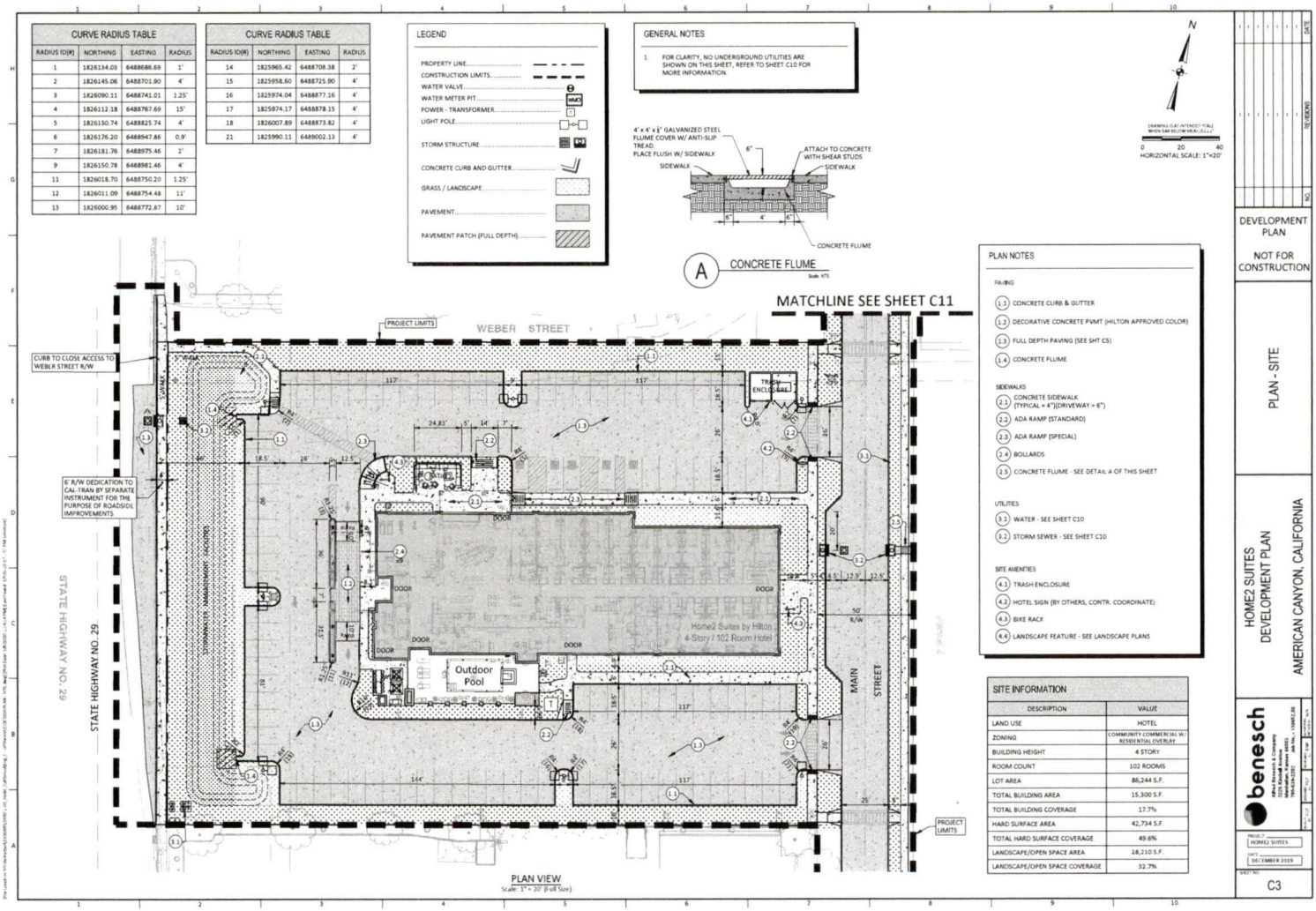
NOT FOR CONSTRUCTION

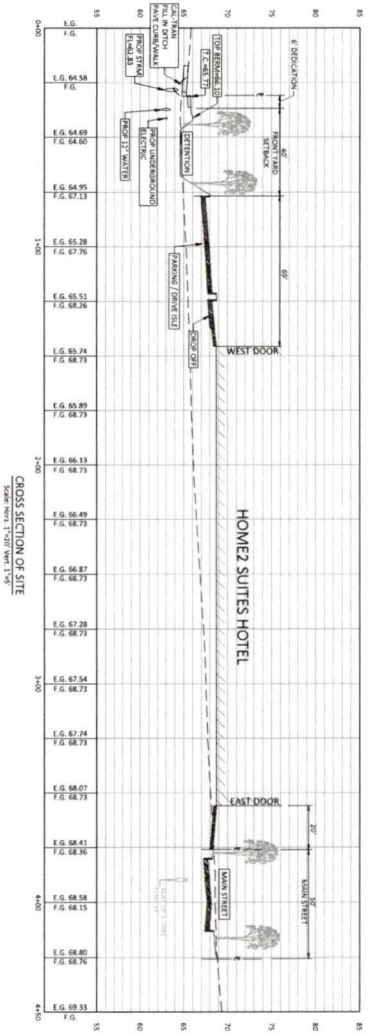
GENERAL NOTES & VICINITY MAP

HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

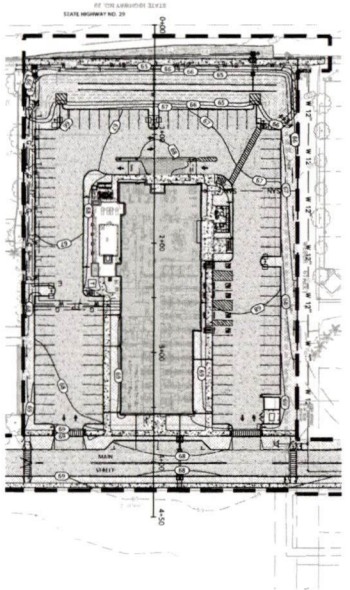
benesch

PROJECT: HOME2 SUITES
DATE: DECEMBER 2019
SHEET NO.: C2


CURVE RADIUS TABLE
RADIUS ID(#) | NORTHING | EASTING | RADIUS
1 | 1826134.03 | 6488686.69 | 1'
2 | 1826145.06 | 6488701.90 | 4'
3 | 1826090.11 | 6488741.01 | 1.25'
4 | 1826112.18 | 6488767.69 | 15'
5 | 1826130.74 | 6488825.74 | 4'
6 | 1826176.20 | 6488947.86 | 0.9'
7 | 1826181.76 | 6488975.46 | 2'
9 | 1826150.78 | 6488981.46 | 4'
11 | 1826018.70 | 6488750.20 | 1.25'
12 | 1826011.09 | 6488754.48 | 11'
13 | 1826000.95 | 6488772.87 | 10'
CURVE RADIUS TABLE
RADIUS ID(#) | NORTHING | EASTING | RADIUS
14 | 1825965.42 | 6488708.38 | 2'
15 | 1825958.60 | 6488725.90 | 4'
16 | 1825974.04 | 6488877.16 | 4'
17 | 1825974.17 | 6488878.15 | 4'
18 | 1826007.89 | 6488873.82 | 4'
21 | 1825990.11 | 6489002.13 | 4'
LEGEND
PROPERTY LINE
CONSTRUCTION LIMITS
WATER VALVE
WATER METER PIT
POWER - TRANSFORMER
LIGHT POLE
STORM STRUCTURE
CONCRETE CURB AND GUTTER
GRASS / LANDSCAPE
PAVEMENT
PAVEMENT PATCH (FULL DEPTH)
GENERAL NOTES
1. FOR CLARITY, NO UNDERGROUND UTILITIES ARE SHOWN ON THIS SHEET, REFER TO SHEET C10 FOR MORE INFORMATION
4' x 4' x 1" GALVANIZED STEEL FLUME COVER W/ ANTI-SLIP TREAD. PLACE FLUSH W/ SIDEWALK
ATTACH TO CONCRETE WITH SHEAR STUDS
SIDEWALK
CONCRETE FLUME
A CONCRETE FLUME
HORIZONTAL SCALE: 1"=20'
MATCHLINE SEE SHEET C11
PROJECT LIMITS
WEBER STREET
CURB TO CLOSE ACCESS TO WEBER STREET R/W
6' R/W DEDICATION TO CAL-TRAN BY SEPARATE INSTRUMENT FOR THE PURPOSE OF ROADSIDE IMPROVEMENTS
STATE HIGHWAY NO. 29
TRASH ENCLOSURE
Home2 Suites by Hilton
4-Story / 102 Room Hotel
Outdoor Pool
MAIN STREET
50' R/W
PROJECT LIMITS
PLAN NOTES
PAVING
1.1 CONCRETE CURB & GUTTER
1.2 DECORATIVE CONCRETE PVMT. (HILTON APPROVED COLOR)
1.3 FULL DEPTH PAVING (SEE SHT C5)
1.4 CONCRETE FLUME
SIDEWALKS
2.1 CONCRETE SIDEWALK (TYPICAL = 4")(DRIVEWAY = 6")
2.2 ADA RAMP (STANDARD)
2.3 ADA RAMP (SPECIAL)
2.4 BOLLARDS
2.5 CONCRETE FLUME - SEE DETAIL A OF THIS SHEET
UTILITIES
3.1 WATER - SEE SHEET C10
3.2 STORM SEWER - SEE SHEET C10
SITE AMENITIES
4.1 TRASH ENCLOSURE
4.2 HOTEL SIGN (BY OTHERS, CONTR. COORDINATE)
4.3 BIKE RACK
4.4 LANDSCAPE FEATURE - SEE LANDSCAPE PLANS
SITE INFORMATION
DESCRIPTION | VALUE
LAND USE | HOTEL
ZONING | COMMUNITY COMMERCIAL W/ RESIDENTIAL OVERLAY
BUILDING HEIGHT | 4 STORY
ROOM COUNT | 102 ROOMS
LOT AREA | 86,244 S.F.
TOTAL BUILDING AREA | 15,300 S.F.
TOTAL BUILDING COVERAGE | 17.7%
HARD SURFACE AREA | 42,734 S.F.
TOTAL HARD SURFACE COVERAGE | 49.6%
LANDSCAPE/OPEN SPACE AREA | 28,210 S.F.
LANDSCAPE/OPEN SPACE COVERAGE | 32.7%
PLAN VIEW
Scale: 1" = 20' (Full Size)
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
PLAN - SITE
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
benesch
HOME2 SUITES
DECEMBER 2019
C3

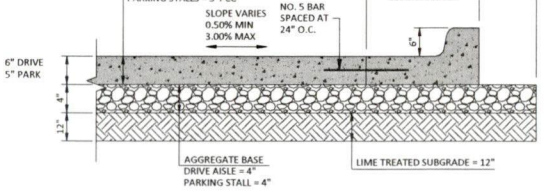


CROSS SECTION OF SITE
Scale: Horz. 1"=10' Vert. 1"=5'

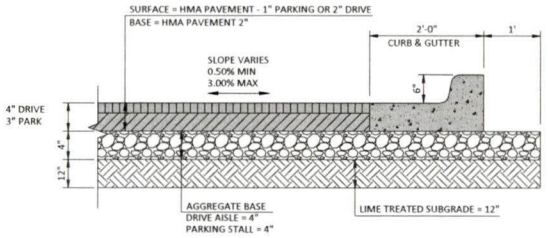


SECTION LOCATION KEY MAP
Scale: 1" = 40' (Full Size)

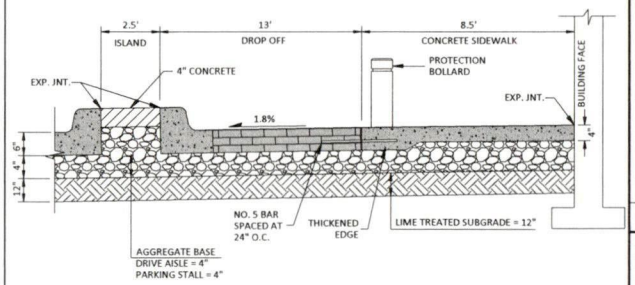
benesch Alfred Benesch & Company 222K Kimball Avenue Manhattan, Kansas 66503 785-539-2202	HOME2 SUITES DEVELOPMENT PLAN AMERICAN CANYON, CALIFORNIA	LAYOUT	DEVELOPMENT PLAN NOT FOR CONSTRUCTION	NO. / REVISIONS / DATE



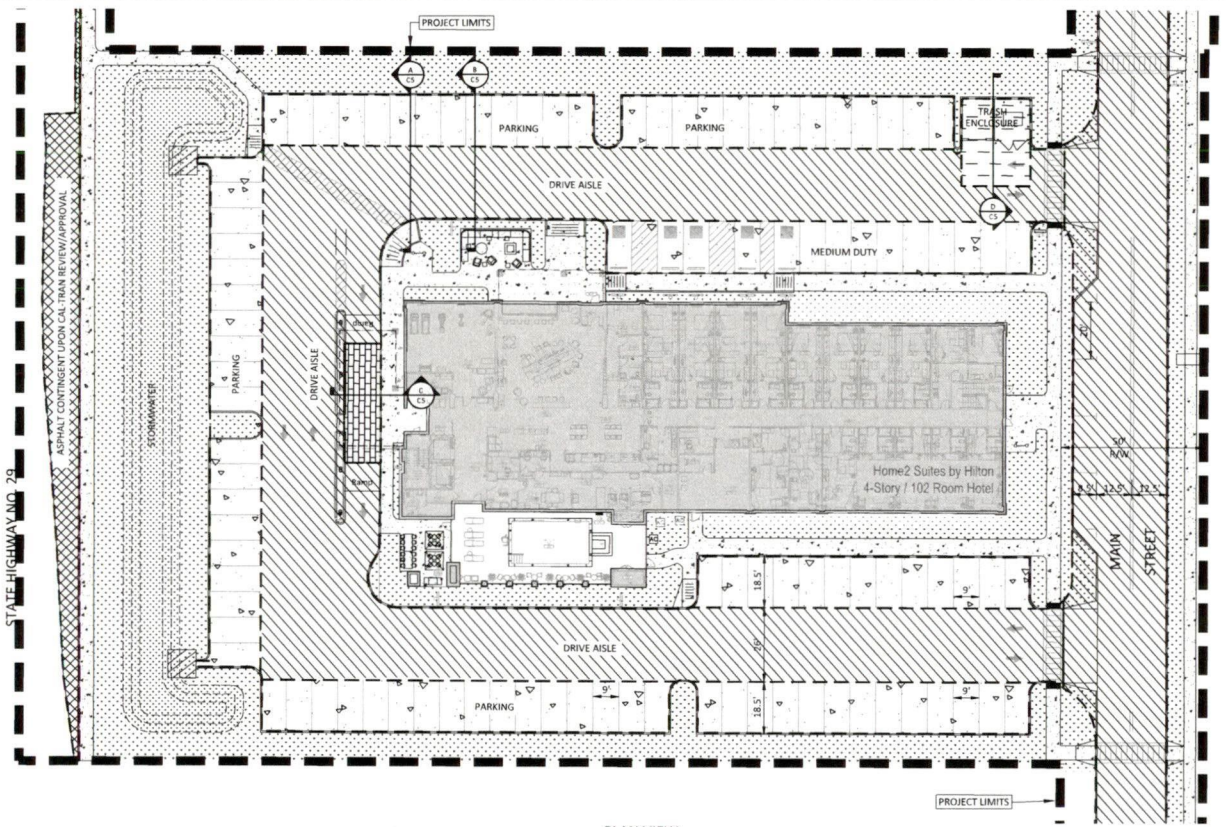
B CONCRETE (BASE BID)



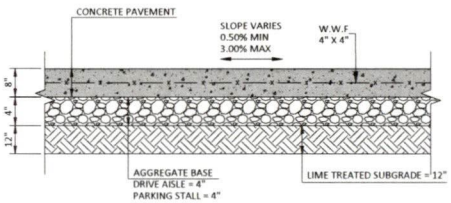
A ASPHALT (ADD ALTERNATE)



C FRONT DROP OFF / CHECK IN



PLAN VIEW
Scale: 1" = 20' (Full Size)



D TRASH ENCLOSURE

GEOTECHNICAL NOTES

1. ALL PAVING, GRADING & UTILITY CONSTRUCTION SHALL CONFORM TO THE GEOTECHNICAL REPORT FOR THIS PROJECT DATED MARCH 12, 2019 BY TERRACON CONSULTANTS, INC., AND AS MAY BE AMENDED.

N

DRAWING IS AT INTENDED SCALE WHEN BAR BELOW MEASURES 2"
0 20 40
HORIZONTAL SCALE: 1"=20'

DEVELOPMENT PLAN
NOT FOR CONSTRUCTION

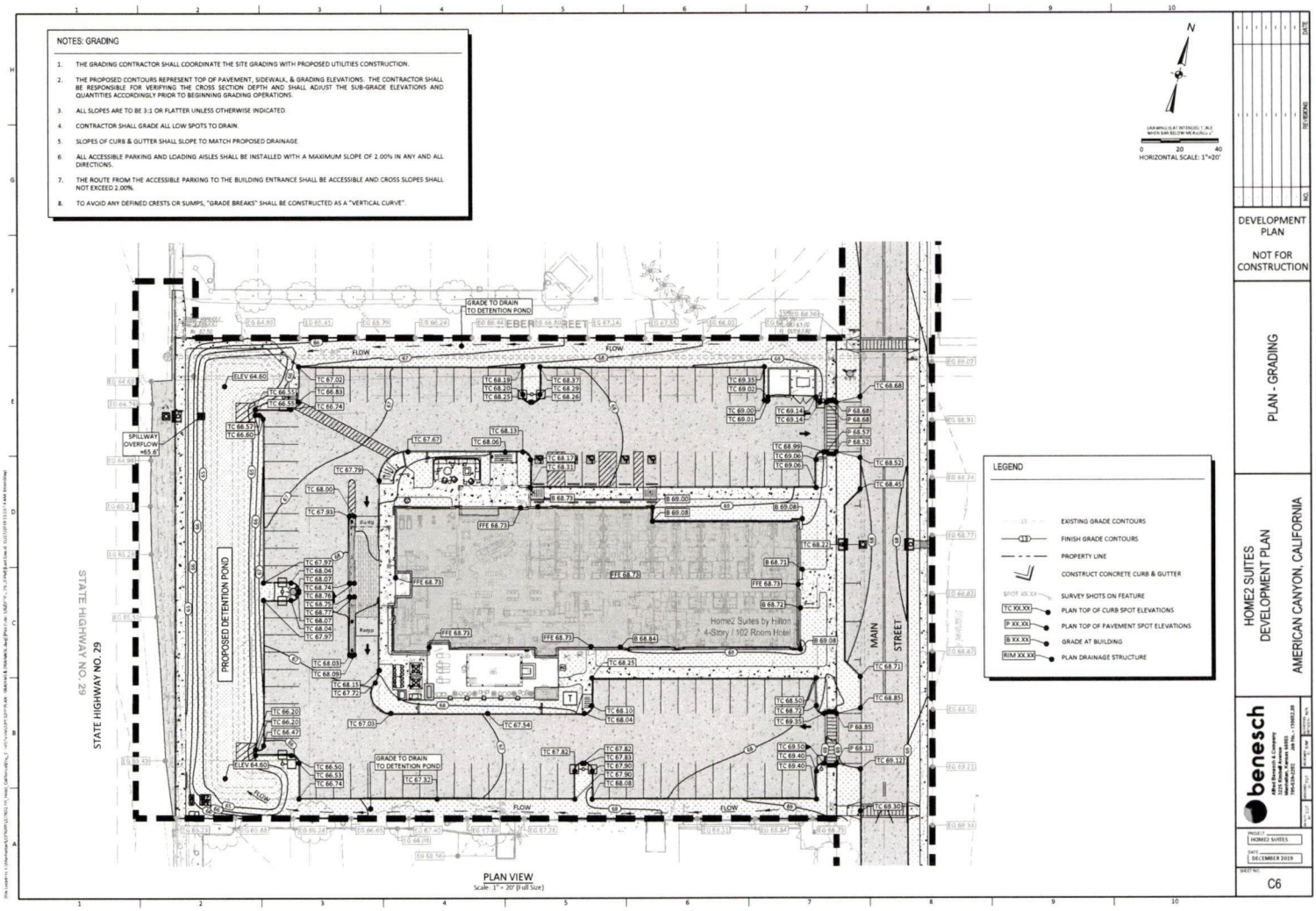
PLAN - PAVING

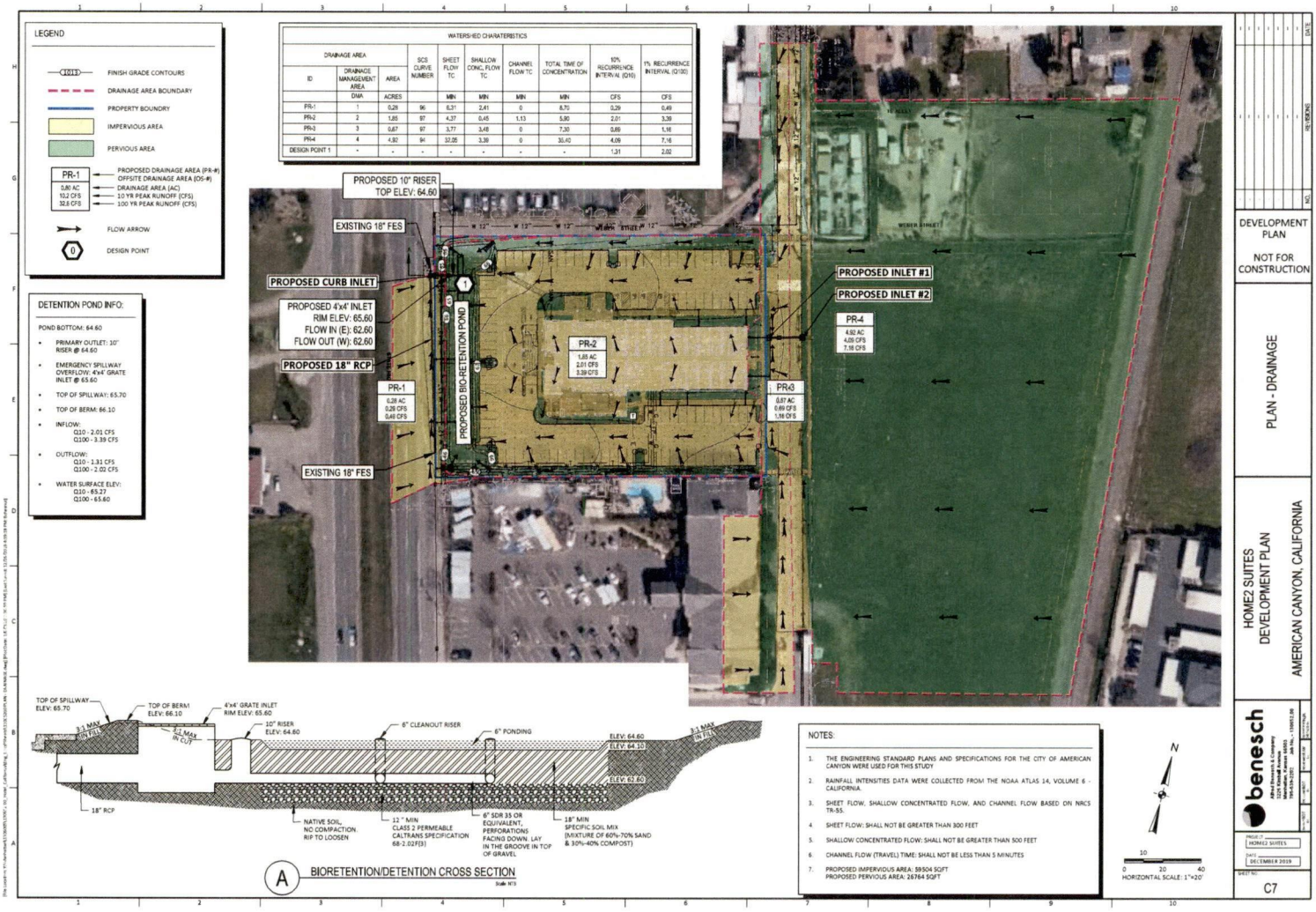
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

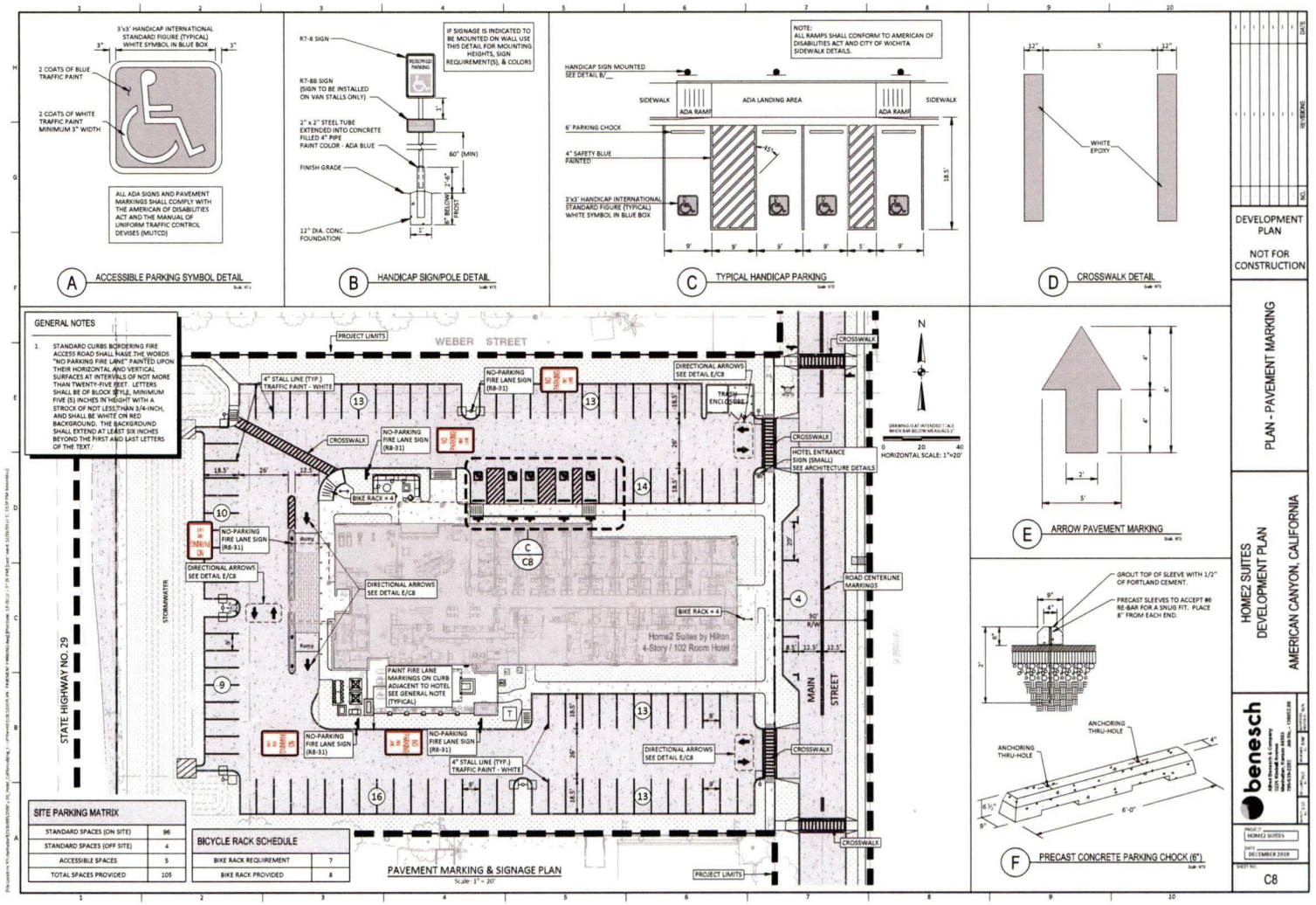
benesch
Alfred Benesch & Company
1230 Rosecrans Avenue
Manhattan Beach, CA 90503
310-536-2202
Job No. - 130862.00

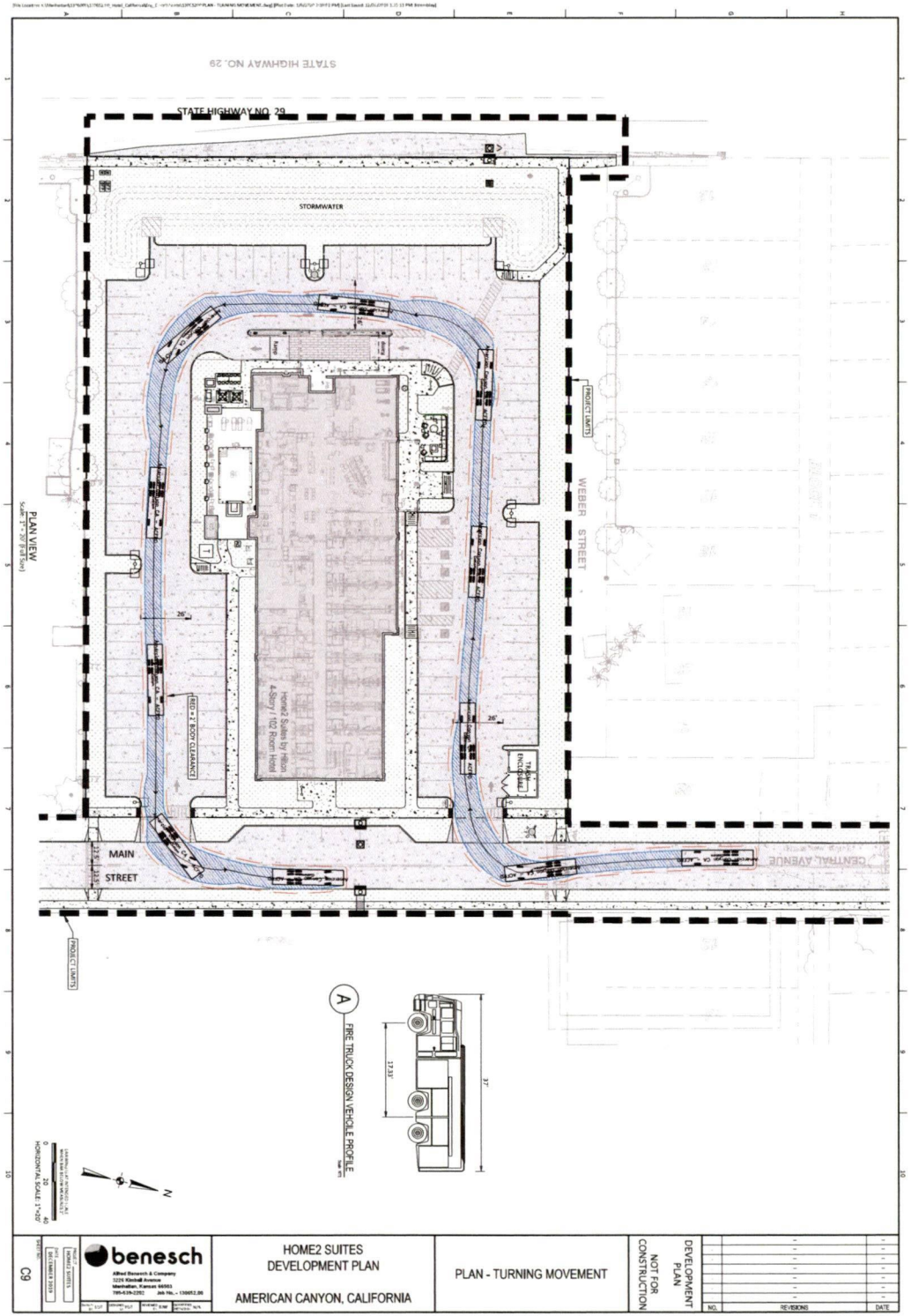
PROJECT: HOME2 SUITES
DATE: DECEMBER 2019
SHEET NO: C5

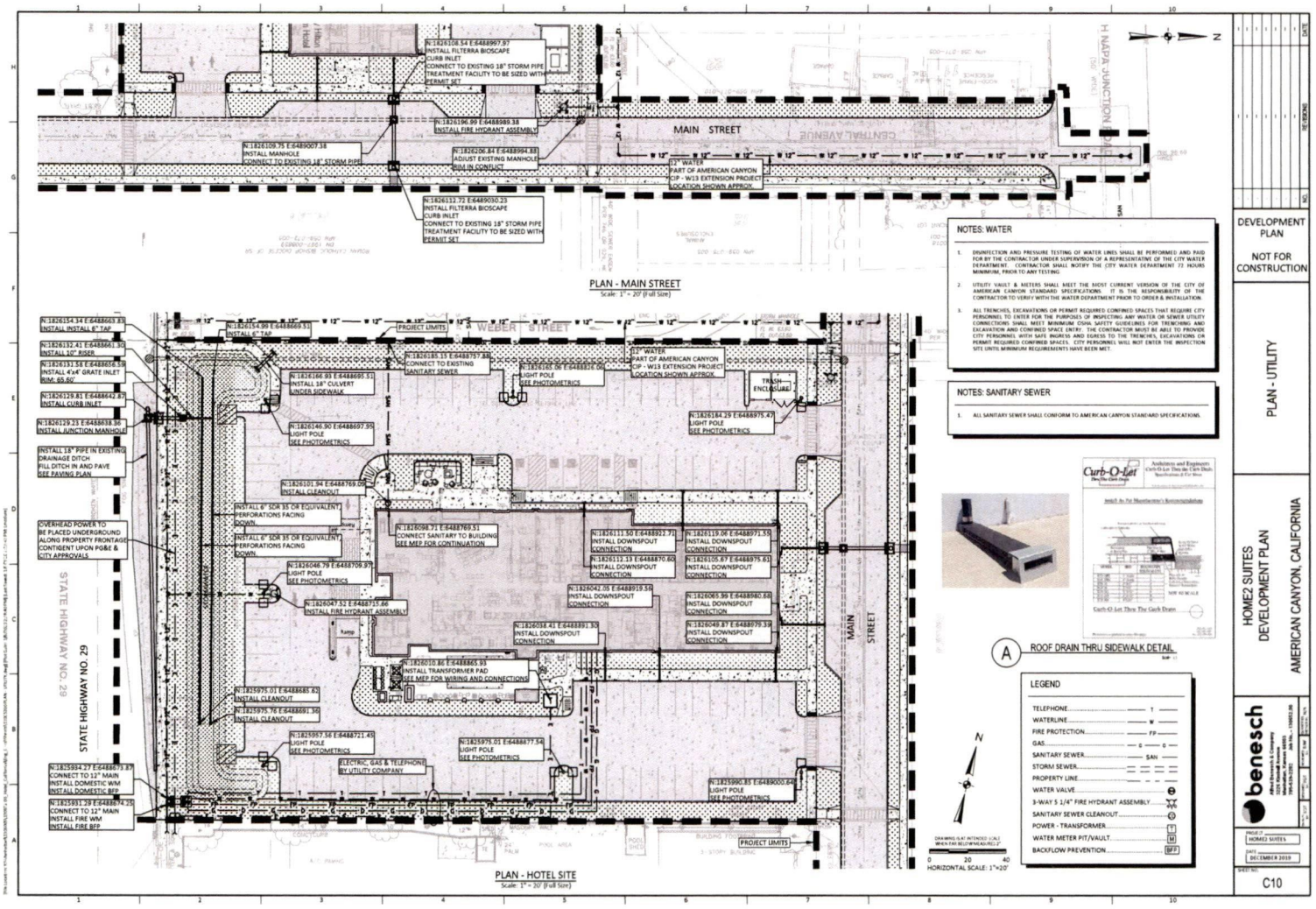
REVISIONS
NO. DATE


NOTES: GRADING
1. THE GRADING CONTRACTOR SHALL COORDINATE THE SITE GRADING WITH PROPOSED UTILITIES CONSTRUCTION.
2. THE PROPOSED CONTOURS REPRESENT TOP OF PAVEMENT, SIDEWALK, & GRADING ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CROSS SECTION DEPTH AND SHALL ADJUST THE SUB-GRADE ELEVATIONS AND QUANTITIES ACCORDINGLY PRIOR TO BEGINNING GRADING OPERATIONS.
3. ALL SLOPES ARE TO BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED.
4. CONTRACTOR SHALL GRADE ALL LOW SPOTS TO DRAIN.
5. SLOPES OF CURB & GUTTER SHALL SLOPE TO MATCH PROPOSED DRAINAGE.
6. ALL ACCESSIBLE PARKING AND LOADING AISLES SHALL BE INSTALLED WITH A MAXIMUM SLOPE OF 2.00% IN ANY AND ALL DIRECTIONS.
7. THE ROUTE FROM THE ACCESSIBLE PARKING TO THE BUILDING ENTRANCE SHALL BE ACCESSIBLE AND CROSS SLOPES SHALL NOT EXCEED 2.00%.
8. TO AVOID ANY DEFINED CRESTS OR SUMPS, "GRADE BREAKS" SHALL BE CONSTRUCTED AS A "VERTICAL CURVE".
N
0 20 40
HORIZONTAL SCALE: 1"=20'
LEGEND
EXISTING GRADE CONTOURS
FINISH GRADE CONTOURS
PROPERTY LINE
CONSTRUCT CONCRETE CURB & GUTTER
SURVEY SHOTS ON FEATURE
PLAN TOP OF CURB SPOT ELEVATIONS
PLAN TOP OF PAVEMENT SPOT ELEVATIONS
GRADE AT BUILDING
PLAN DRAINAGE STRUCTURE
PROPOSED DETENTION POND
STATE HIGHWAY NO. 29
EBEN STREET
MAIN STREET
Home2 Suites by Hilton
4-Story / 102 Room Hotel
GRADE TO DRAIN TO DETENTION POND
SPILLWAY OVERFLOW =65.6'
FLOW
PLAN VIEW
Scale: 1" = 20' (Full Size)
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
PLAN - GRADING
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
benesch
PROJECT HOME2 SUITES
DATE DECEMBER 2019
SHEET NO. C6


LEGEND
FINISH GRADE CONTOURS
DRAINAGE AREA BOUNDARY
PROPERTY BOUNDRY
IMPERVIOUS AREA
PERVIOUS AREA
PR-1
0.80 AC
10.2 CFS
32.8 CFS
PROPOSED DRAINAGE AREA (PR-#)
OFFSITE DRAINAGE AREA (OS-#)
DRAINAGE AREA (AC)
10 YR PEAK RUNOFF (CFS)
100 YR PEAK RUNOFF (CFS)
FLOW ARROW
DESIGN POINT
DETENTION POND INFO:
POND BOTTOM: 64.60
PRIMARY OUTLET: 10" RISER @ 64.60
EMERGENCY SPILLWAY OVERFLOW: 4'x4' GRATE INLET @ 65.60
TOP OF SPILLWAY: 65.70
TOP OF BERM: 66.10
INFLOW: Q10 - 2.01 CFS Q100 - 3.39 CFS
OUTFLOW: Q10 - 1.31 CFS Q100 - 2.02 CFS
WATER SURFACE ELEV: Q10 - 65.27 Q100 - 65.60
WATERSHED CHARATERISTICS
DRAINAGE AREA
ID
DRAINAGE MANAGEMENT AREA
AREA
SCS CURVE NUMBER
SHEET FLOW TC
SHALLOW CONC. FLOW TC
CHANNEL FLOW TC
TOTAL TIME OF CONCENTRATION
10% RECURRENCE INTERVAL (Q10)
1% RECURRENCE INTERVAL (Q100)
DMA
ACRES
MIN
MIN
MIN
MIN
CFS
CFS
PR-1 1 0.28 96 6.31 2.41 0 8.70 0.39 0.69
PR-2 2 1.85 97 4.37 0.45 1.13 5.80 2.01 3.39
PR-3 3 0.87 97 3.77 3.48 0 7.30 0.69 1.16
PR-4 4 4.92 94 32.05 3.39 0 35.40 4.09 7.16
DESIGN POINT 1 - - - - - - 1.31 2.02
PROPOSED 10" RISER TOP ELEV: 64.60
EXISTING 18" FES
PROPOSED CURB INLET
PROPOSED 4'x4' INLET RIM ELEV: 65.60 FLOW IN (E): 62.60 FLOW OUT (W): 62.60
PROPOSED 18" RCP
EXISTING 18" FES
PROPOSED BIO-RETENTION POND
PR-1 0.28 AC 0.39 CFS 0.69 CFS
PR-2 1.85 AC 2.01 CFS 3.39 CFS
PR-3 0.87 AC 0.69 CFS 1.16 CFS
PR-4 4.92 AC 4.09 CFS 7.16 CFS
PROPOSED INLET #1
PROPOSED INLET #2
WEIR INLET
TOP OF SPILLWAY ELEV: 65.70
TOP OF BERM ELEV: 66.10
4'x4' GRATE INLET RIM ELEV: 65.60
10" RISER ELEV: 64.60
6" CLEANOUT RISER
6" PONDING
ELEV: 64.60
ELEV: 64.10
ELEV: 62.60
3:1 MAX IN FILL
2:1 MAX IN CUT
18" RCP
NATIVE SOIL, NO COMPACTION, RIP TO LOOSEN
12" MIN CLASS 2 PERMEABLE CALTRANS SPECIFICATION 68-2.02F(3)
6" SDR 35 OR EQUIVALENT, PERFORATIONS FACING DOWN, LAY IN THE GROOVE IN TOP OF GRAVEL
18" MIN SPECIFIC SOIL MIX (MIXTURE OF 60%-70% SAND & 30%-40% COMPOST)
A BIORETENTION/DETENTION CROSS SECTION
Scale: N.T.S.
NOTES:
1. THE ENGINEERING STANDARD PLANS AND SPECIFICATIONS FOR THE CITY OF AMERICAN CANYON WERE USED FOR THIS STUDY
2. RAINFALL INTENSITIES DATA WERE COLLECTED FROM THE NOAA ATLAS 14, VOLUME 6 - CALIFORNIA.
3. SHEET FLOW, SHALLOW CONCENTRATED FLOW, AND CHANNEL FLOW BASED ON NRCS TR-55.
4. SHEET FLOW: SHALL NOT BE GREATER THAN 300 FEET
5. SHALLOW CONCENTRATED FLOW: SHALL NOT BE GREATER THAN 500 FEET
6. CHANNEL FLOW (TRAVEL) TIME: SHALL NOT BE LESS THAN 5 MINUTES
7. PROPOSED IMPERVIOUS AREA: 59504 SQFT PROPOSED PERVIOUS AREA: 26764 SQFT
N
0 20 40
HORIZONTAL SCALE: 1"=20'
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
PLAN - DRAINAGE
HOME2 SUITES DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
benesch
PROJECT HOME2 SUITES
DATE DECEMBER 2019
SHEET NO. C7


3'x3' HANDICAP INTERNATIONAL STANDARD FIGURE (TYPICAL) WHITE SYMBOL IN BLUE BOX
2 COATS OF BLUE TRAFFIC PAINT
2 COATS OF WHITE TRAFFIC PAINT MINIMUM 3" WIDTH
ALL ADA SIGNS AND PAVEMENT MARKINGS SHALL COMPLY WITH THE AMERICAN OF DISABILITIES ACT AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVISES (MUTCD)
A ACCESSIBLE PARKING SYMBOL DETAIL
R7-8 SIGN
R7-8B SIGN (SIGN TO BE INSTALLED ON VAN STALLS ONLY)
2" x 2" STEEL TUBE EXTENDED INTO CONCRETE FILLED 4" PIPE PAINT COLOR - ADA BLUE
FINISH GRADE
12" DIA. CONC. FOUNDATION
60" (MIN)
IF SIGNAGE IS INDICATED TO BE MOUNTED ON WALL USE THIS DETAIL FOR MOUNTING HEIGHTS, SIGN REQUIREMENT(S), & COLORS
B HANDICAP SIGN/POLE DETAIL
NOTE: ALL RAMPS SHALL CONFORM TO AMERICAN OF DISABILITIES ACT AND CITY OF WICHITA SIDEWALK DETAILS.
HANDICAP SIGN MOUNTED SEE DETAIL B/__
SIDEWALK
ADA RAMP
ADA LANDING AREA
6' PARKING CHOCK
4" SAFETY BLUE PAINTED
3'x3' HANDICAP INTERNATIONAL STANDARD FIGURE (TYPICAL) WHITE SYMBOL IN BLUE BOX
C TYPICAL HANDICAP PARKING
WHITE EPOXY
D CROSSWALK DETAIL
GENERAL NOTES
1. STANDARD CURBS BORDERING FIRE ACCESS ROAD SHALL HAVE THE WORDS "NO PARKING FIRE LANE" PAINTED UPON THEIR HORIZONTAL AND VERTICAL SURFACES AT INTERVALS OF NOT MORE THAN TWENTY-FIVE FEET. LETTERS SHALL BE OF BLOCK STYLE, MINIMUM FIVE (5) INCHES IN HEIGHT WITH A STROCK OF NOT LESS THAN 3/4-INCH, AND SHALL BE WHITE ON RED BACKGROUND. THE BACKGROUND SHALL EXTEND AT LEAST SIX INCHES BEYOND THE FIRST AND LAST LETTERS OF THE TEXT.
PROJECT LIMITS
WEBER STREET
4" STALL LINE (TYP.) TRAFFIC PAINT - WHITE
NO-PARKING FIRE LANE SIGN (R8-31)
DIRECTIONAL ARROWS SEE DETAIL E/C8
TRASH ENCLOSURE
CROSSWALK
HOTEL ENTRANCE SIGN (SMALL) SEE ARCHITECTURE DETAILS
BIKE RACK x 4
STATE HIGHWAY NO. 29
STORMWATER
Ramp
C C8
Home2 Suites by Hilton 4-Story / 102 Room Hotel
PAINT FIRE LANE MARKINGS ON CURB ADJACENT TO HOTEL SEE GENERAL NOTE (TYPICAL)
ROAD CENTERLINE MARKINGS
50' R/W
MAIN STREET
HORIZONTAL SCALE: 1"=20'
PAVEMENT MARKING & SIGNAGE PLAN
Scale: 1" = 20'
SITE PARKING MATRIX
STANDARD SPACES (ON SITE) 96
STANDARD SPACES (OFF SITE) 4
ACCESSIBLE SPACES 5
TOTAL SPACES PROVIDED 105
BICYCLE RACK SCHEDULE
BIKE RACK REQUIREMENT 7
BIKE RACK PROVIDED 8
E ARROW PAVEMENT MARKING
GROUT TOP OF SLEEVE WITH 1/2" OF PORTLAND CEMENT.
PRECAST SLEEVES TO ACCEPT #6 RE-BAR FOR A SNUG FIT. PLACE 8" FROM EACH END.
ANCHORING THRU-HOLE
F PRECAST CONCRETE PARKING CHOCK (6")
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
PLAN - PAVEMENT MARKING
HOME2 SUITES DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
benesch
HOME2 SUITES
DECEMBER 2019
C8


STATE HIGHWAY NO. 29
STORMWATER
PROJECT LIMITS
WEBER STREET
PLAN VIEW
Scale: 1"=30' (Full Size)
Home2 Suites by Hilton
4-Story / 102 Room Hotel
RED = 1' BODY CLEARANCE
MAIN
STREET
CENTRAL AVENUE
PROJECT LIMITS
A
FIRE TRUCK DESIGN VEHICLE PROFILE
37'
HORIZONTAL SCALE: 1"=20'
benesch
Alfred Benesch & Company
3229 Kimball Avenue
Manhattan, Kansas 66503
785-539-3292
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
PLAN - TURNING MOVEMENT
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
C9
NO.
REVISIONS
DATE



NOTES: WATER

1. DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR UNDER SUPERVISION OF A REPRESENTATIVE OF THE CITY WATER DEPARTMENT. CONTRACTOR SHALL NOTIFY THE CITY WATER DEPARTMENT 72 HOURS MINIMUM, PRIOR TO ANY TESTING.
2. UTILITY VAULT & METERS SHALL MEET THE MOST CURRENT VERSION OF THE CITY OF AMERICAN CANYON STANDARD SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE WATER DEPARTMENT PRIOR TO ORDER & INSTALLATION.
3. ALL TRENCHES, EXCAVATIONS OR PERMIT REQUIRED CONFINED SPACES THAT REQUIRE CITY PERSONNEL TO ENTER FOR THE PURPOSES OF INSPECTING ANY WATER OR SEWER UTILITY CONNECTIONS SHALL MEET MINIMUM OSHA SAFETY GUIDELINES FOR TRENCHING AND EXCAVATION AND CONFINED SPACE ENTRY. THE CONTRACTOR MUST BE ABLE TO PROVIDE CITY PERSONNEL WITH SAFE INGRESS AND EGRESS TO THE TRENCHES, EXCAVATIONS OR PERMIT REQUIRED CONFINED SPACES. CITY PERSONNEL WILL NOT ENTER THE INSPECTION SITE UNTIL MINIMUM REQUIREMENTS HAVE BEEN MET.

NOTES: SANITARY SEWER

1. ALL SANITARY SEWER SHALL CONFORM TO AMERICAN CANYON STANDARD SPECIFICATIONS.

A ROOF DRAIN THRU SIDEWALK DETAIL

LEGEND

TELEPHONE	T
WATERLINE	W
FIRE PROTECTION	FP
GAS	G
SANITARY SEWER	SAN
STORM SEWER	
PROPERTY LINE	
WATER VALVE	
3-WAY 5 1/4" FIRE HYDRANT ASSEMBLY	
SANITARY SEWER CLEANOUT	
POWER - TRANSFORMER	
WATER METER PIT/VAULT	M
BACKFLOW PREVENTION	BFP

DEVELOPMENT PLAN

NOT FOR CONSTRUCTION

PLAN - UTILITY

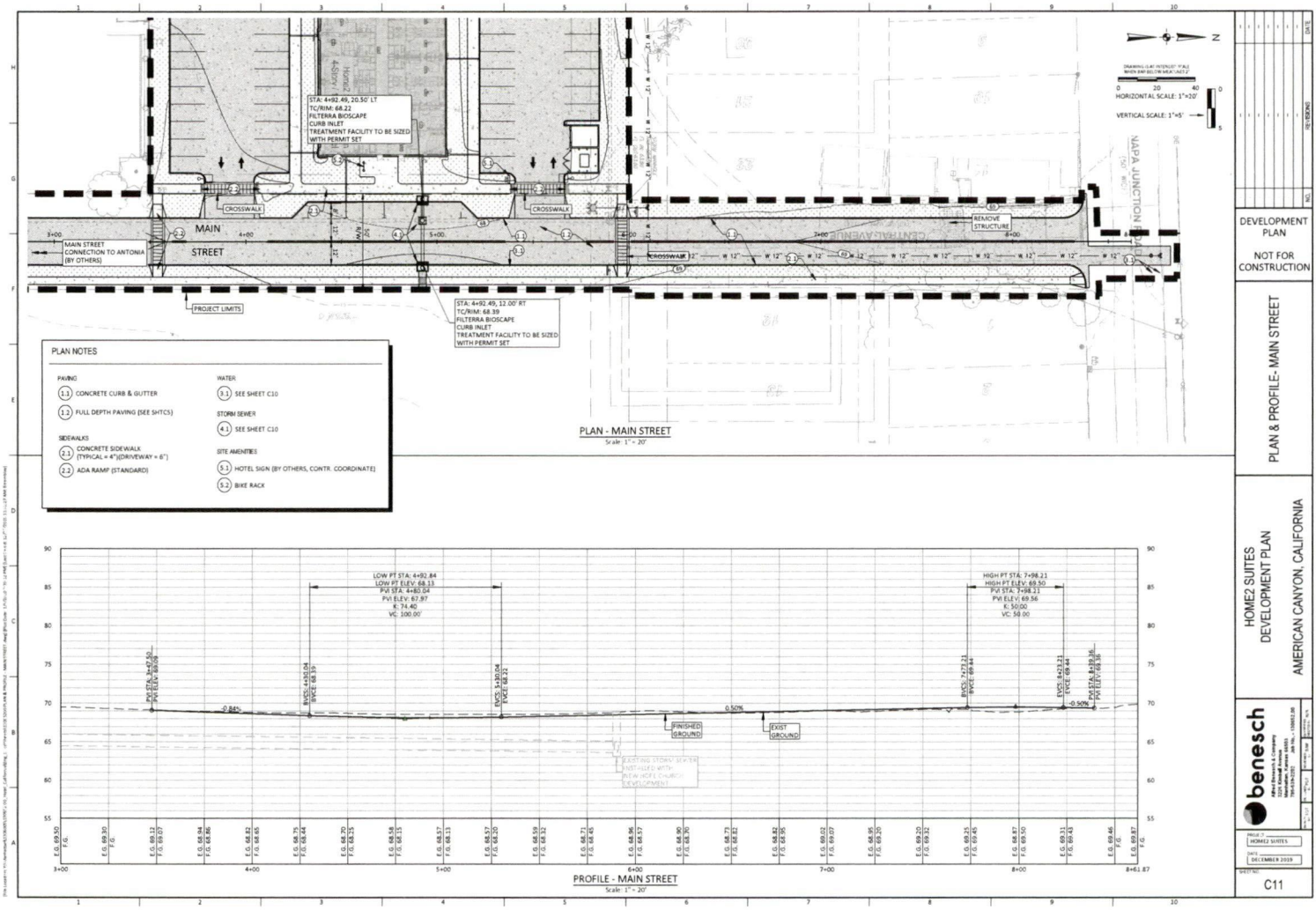
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

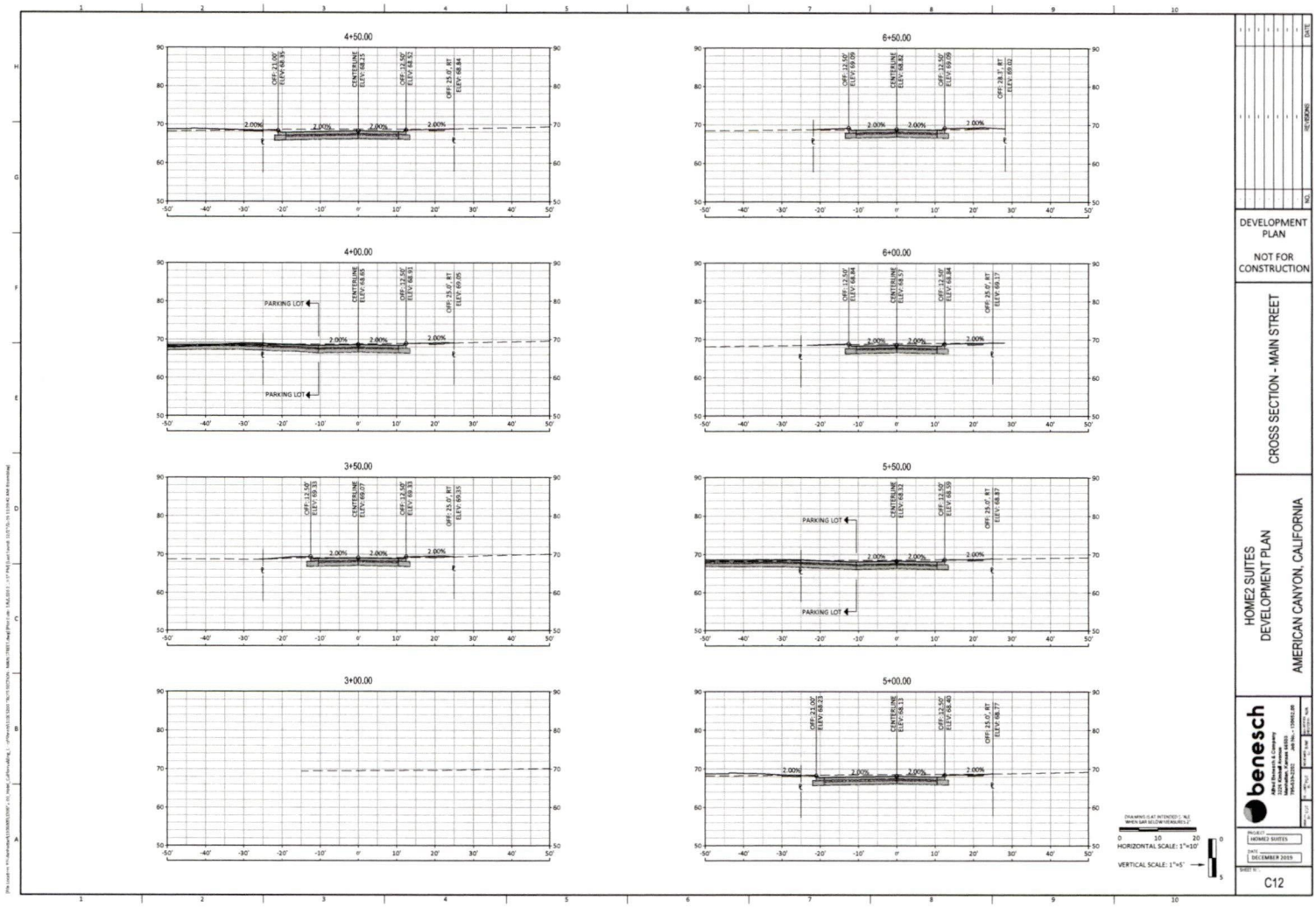
benesch

PROJECT: HOME2 SUITES

DATE: DECEMBER 2019

SHEET NO.: C10


STA: 4+92.49, 20.50' LT
TC/RIM: 68.22
FILTERRA BIOSCAPE
CURB INLET
TREATMENT FACILITY TO BE SIZED WITH PERMIT SET
CROSSWALK
MAIN STREET
MAIN STREET CONNECTION TO ANTONIA (BY OTHERS)
PROJECT LIMITS
STA: 4+92.49, 12.00' RT
TC/RIM: 68.39
FILTERRA BIOSCAPE
CURB INLET
TREATMENT FACILITY TO BE SIZED WITH PERMIT SET
REMOVE STRUCTURE
CROSSWALK
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'
PLAN NOTES
PAVING
1.1 CONCRETE CURB & GUTTER
1.2 FULL DEPTH PAVING (SEE SHTCS)
SIDEWALKS
2.1 CONCRETE SIDEWALK (TYPICAL = 4")(DRIVEWAY = 6")
2.2 ADA RAMP (STANDARD)
WATER
3.1 SEE SHEET C10
STORM SEWER
4.1 SEE SHEET C10
SITE AMENITIES
5.1 HOTEL SIGN (BY OTHERS, CONTR. COORDINATE)
5.2 BIKE RACK
PLAN - MAIN STREET
Scale: 1" = 20'
LOW PT STA: 4+92.84
LOW PT ELEV: 68.13
PVI STA: 4+80.04
PVI ELEV: 67.97
K: 74.40
VC: 100.00'
HIGH PT STA: 7+98.21
HIGH PT ELEV: 69.50
PVI STA: 7+98.21
PVI ELEV: 69.56
K: 50.00
VC: 50.00
-0.84%
0.50%
-0.50%
FINISHED GROUND
EXIST GROUND
EXISTING STORM SEWER INSTALLED WITH PLAN HOTEL CHURCH DEVELOPMENT
PROFILE - MAIN STREET
Scale: 1" = 20'
DEVELOPMENT PLAN
NOT FOR CONSTRUCTION
PLAN & PROFILE- MAIN STREET
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA
benesch
PROJECT
HOME2 SUITES
DATE
DECEMBER 2019
SHEET NO.
C11



DEVELOPMENT PLAN

NOT FOR CONSTRUCTION

CROSS SECTION - MAIN STREET

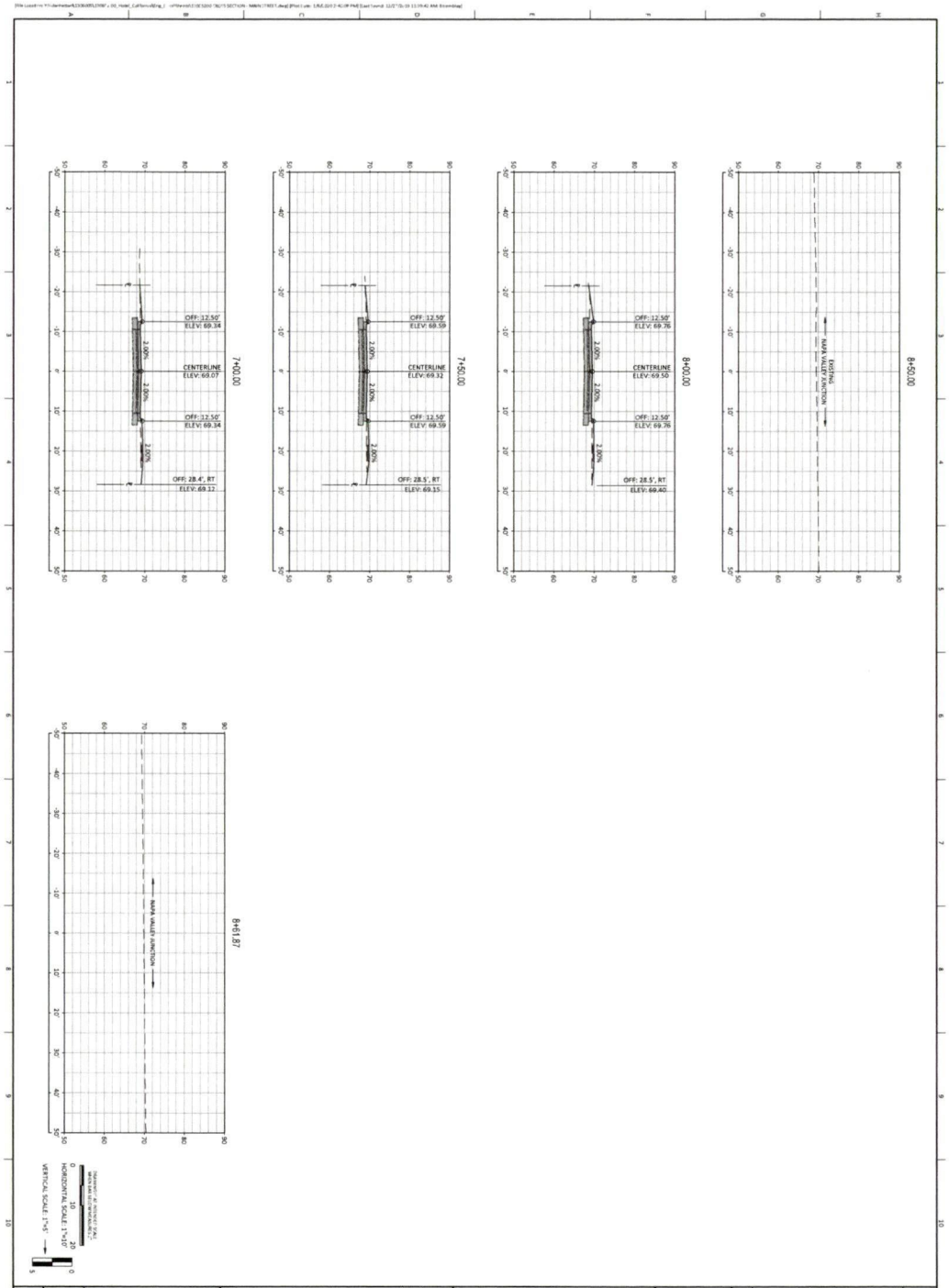
HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

benesch

PROJECT: HOME2 SUITES

DATE: DECEMBER 2019

SHEET NO.: C12



benesch
Alfred Benesch & Company
3235 Kimball Avenue
Manhattan, Kansas 66503
785-539-3565 Job No. - 150052.00

HOME2 SUITES
DEVELOPMENT PLAN

AMERICAN CANYON, CALIFORNIA

CROSS SECTION - MAIN STREET

DEVELOPMENT PLAN
NOT FOR CONSTRUCTION

NO.	REVISIONS	DATE

C13

LANDSCAPE AND IRRIGATION MAINTENANCE

1. LANDSCAPES SHALL BE MAINTAINED TO ENSURE SUCCESSFUL ESTABLISHMENT FOLLOWING INSTALLATION AND TO ENSURE WATER USE EFFICIENCY.

NOTE:
IRRIGATION PLAN CONSISTENT WITH THE CITY'S DROUGHT TOLERANT LANDSCAPE REQUIREMENTS SHALL BE PROVIDED AS PART OF PERMIT DOCUMENTS. WE WILL COMPLY WITH THE CRITERIA OF THE WATER CONSERVATION IN LANDSCAPING ORDINANCE AND SHALL APPLY THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

PLANTING NOTES

1. AMEND SOIL PER SOILS REPORT RECOMMENDATIONS.
2. PROVIDE 3" MULCH OVER ALL NEW SHRUB AND GROUNDCOVER AREAS. CONTRACTOR SHALL COORDINATE FINAL GRADING IN THESE AREAS TO ACCOMODATE
3. ALL SHRUBS AND GROUNDCOVERS SHALL BE SET 1/2 THE DIMENSION OF THE SPACING FROM ADJACENT WALKS, CURBS AND WALLS UNLESS OTHERWISE SHOWN. ALL SHRUB AND GROUNDCOVER SPACING SHALL BE TRIANGULAR UNLESS DRAWN OTHERWISE.
4. WHERE CIRCLE DEPICTS PLANT, CENTER POINT OF CIRCLE EQUALS LOCATION OF TRUNK OF PLANT, TYPICAL.

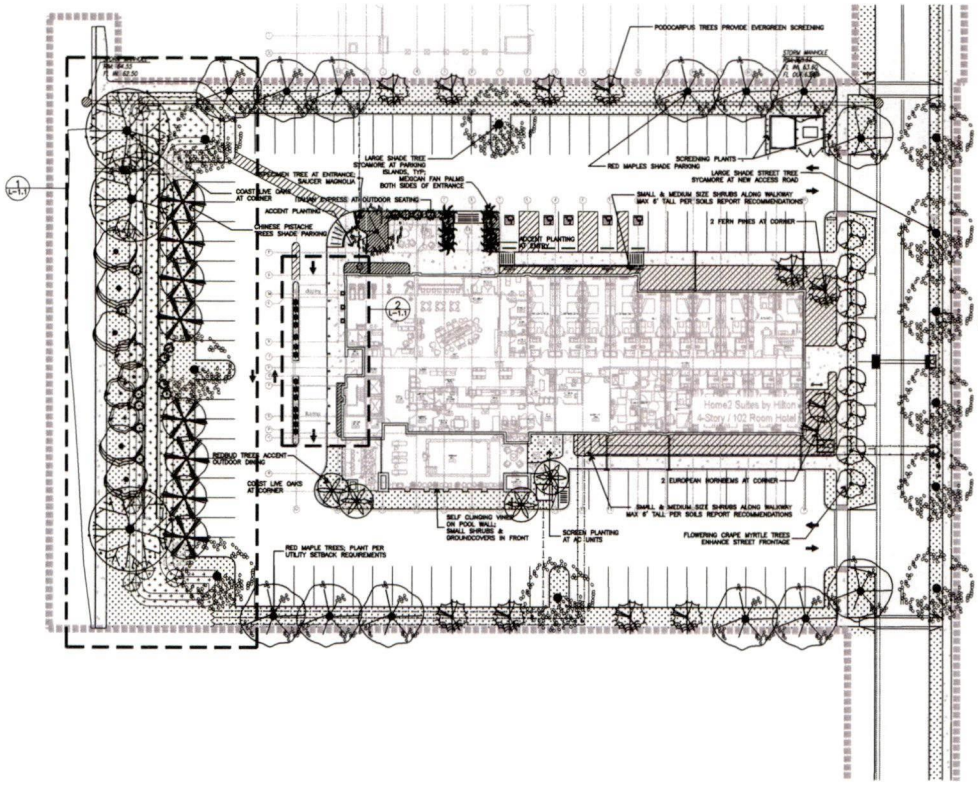
LEGEND

- DROUGHT TOLERANT SHRUBS & GROUNDCOVERS
- ACCENT PLANTING
- SMALL & MEDIUM SIZE SHRUBS & GROUNDCOVERS
- DETENTION BASIN PLANTING

PLANT MATERIAL LIST

TREES

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
	ACE RUB	ACER RUBRUM 'AUTUMN BLAZE'	RED MAPLE	24" BOX	M	13
	CAR BET	CARPINUS BETULUS 'FASTIGIATA'	UPRIGHT EUROPEAN HORNBEAM	24" BOX	M	2
	CUP SEM	CUPRESSUS SEMPERVIRENS 'GLAUCA'	ITALIAN CYPRESS	15 GAL	L	7
	LAG IND	LAGERSTROEMIA INDICA 'TUSKOGEE'	CRAPE MYRTLE	24" BOX	M	8
	MAG SOU	MAGNOLIA SOULANGIANA	SAUCER MAGNOLIA	36" BOX	M	1
	POD GRA	PODOCARPUS GRACILIOR	FERN PINE	15 GAL	L	10
	PLA ACE	PLATANUS ACERIFOLIA 'COLUMBIA'	LONDON PLANE	24" BOX	M	11
	PIS CHI	PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	L	8
	CER OCC	CERCIS OCCIDENTALIS	REDBUD	24" BOX	L	4
	QUE AGR	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	L	3
	WAS ROB	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	36" BOX	L	6



SCALE: 1"=20'

0' 10' 20' 60'

NORTH

YADAV DESIGN GROUP
4135 Business Center Dr
Suite E, Fremont, Ca 94538
main 510.870.1040
fax 510.438.0433
www.yadavdesign.com
• Landscape Architecture •

HOME2 SUITES

AMERICAN CANYON, CA

Job Number	18050
Drawn by	MY
Checked by	MY
Date	07/16/19

Submittal
ISSUE FOR CITY PLAN REVIEW 07/26/19
PLAN CHECK COMMENTS 10/28/19
2ND PLAN CHECK COMMENTS 12/13/19
3RD PLAN CHECK COMMENTS 01/09/20

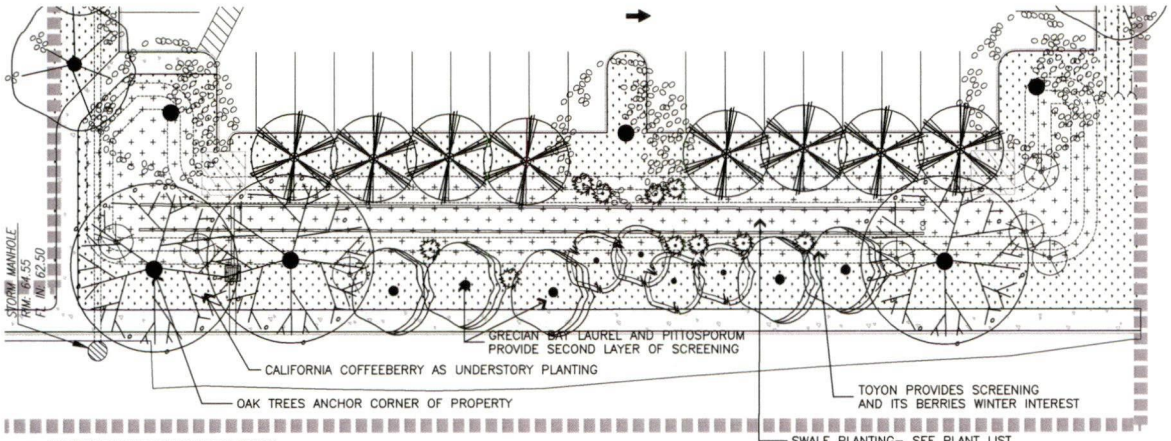
Revision No.

LANDSCAPE PLAN

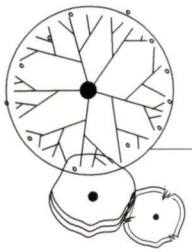
Sheet Number

L-1.0

Sheet No.



1 LANDSCAPE SETBACK OFF BROADWAY



PLANT MATERIAL LIST FOR DETENTION BASIN OFF BROADWAY

NOTE:
PLANT MATERIAL SPECIFIED FOR THE STORMWATER DETENTION AREA IS CONSISTENT WITH PLANTING ALLOWED. THE PLAN IS DEVELOPED USING MATERIAL AS SPECIFIED IN THE BASMAA BIORETENTION FACILITY PLANT MATRIX.

TREES

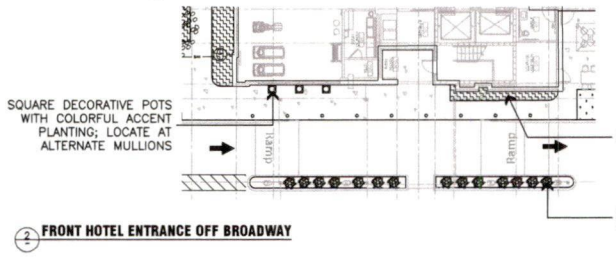
SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
	QUE AGR	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	L	3
	LAU NOB	LAURUS NOBILIS SARATOGA	GRECIAN BAY	24" BOX	L	5
	PIT EUG	PITTOSPORUM EUGENIOIDES	TARATA	24" BOX	L	4

SHRUBS AND GROUNDCOVERS

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS
	HET ARB	HETEROMELES ARBUTIFOLIA	TOYON	5 GALLON	L
	RHA CAL	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	5 GALLON	L

SHRUBS AND GROUNDCOVERS

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE
	RIB AUR	RIBES AUREUM GRACILLIUM	GOLDEN CURRANT	5 GALLON
	CAR BAR	CAREX BARBARAEA	SANTA BARBARA SEDGE	1 GALLON
	FES RUB	FESTUCA RUBRA	RED FESCUE	5 GALLON
	MUH RIG	MUHLENBERGIA RIGENS	DEERGRASS	5 GALLON
	IRI DOU	IRIS DOUGLASIANA	DOUGLAS IRIS	1 GALLON
	RUD CAL	RUDEBECKIA CALIFORNICA	CALIFORNIA CONEFLOWER	1 GALLON
	BAC PIL	BACCHARIS PILULARIS CONSANGUINEA	BUSH BACCHARIS	5 GALLON
	CAR CAL	CARPENTERIA CALIFORNICA	BUSH ANEMONE	5 GALLON



2 FRONT HOTEL ENTRANCE OFF BROADWAY

SCALE: 1"=10'

0' 5' 10' 30'

NORTH

YADAV DESIGN GROUP
420 Bonanza Center Dr.
Suite 1, Petaluma, Ca 94954
mobile 510.870.2240
fax 510.438.0433
www.yadavdesign.com
• Landscape Architecture •

HOME2 SUITES

AMERICAN CANYON, CA

Job Number	18050
Drawn by	MY
Checked by	MY
Date	07/18/19

Revisions
ISSUE FOR CITY PLAN REVIEW 07/26/19
PLAN CHECK COMMENTS 10/28/19
2ND PLAN CHECK COMMENTS 12/13/19
2ND PLAN CHECK COMMENTS 01/03/20

Sheet Title
DETAIL LANDSCAPE PLANS

Sheet Number
L-1.1

STATISTICS

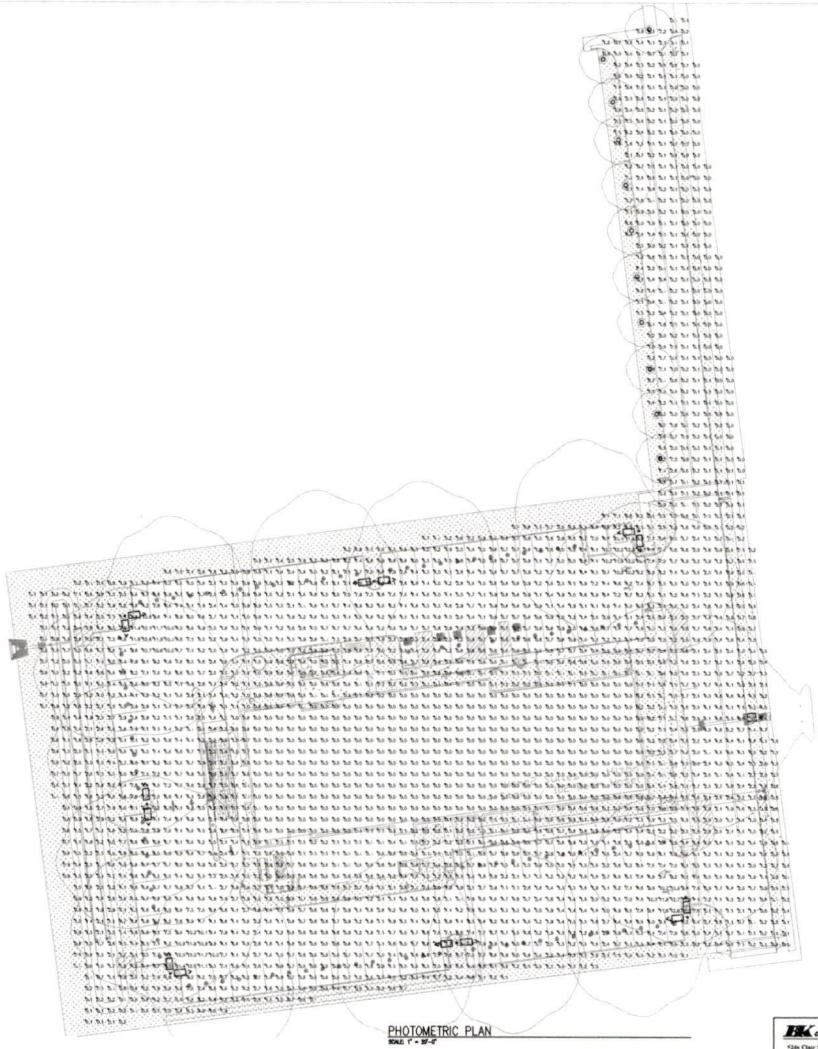
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc. Zone #1	+	2.1 fc	5.1 fc	0.0 fc	N/A	N/A

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	B1/2	1	RAB LED P1-4L 40 Watts 5-7	RAB APP 1 ZONES SIZE 4 PENTHOUSE 1 - 4 HL PHOTOCELL	LED	RAB_LED_P1-4L_40_5-7_PHOTO.ies	4800	L70	100
	A1/2	14	HALO LED7 4 RA No. 5-7 HO	RAB APP ZONES SIZE 4 PENTHOUSE 1 - 4 HL TYPE 4 DOWN MOUNTING: SMALL	LED	RAB_LED_P1-4L_40_5-7_PHOTO.ies	3400	L70	34
	D1	12	7RWHD-LED-DH-AWL/WHT			RAB-7RWHD-LED-Switch/Dim-WHT.ies	1100	L70	18

PHOTOMETRY PLAN KEY NOTES

◇ FIXTURE MOUNTING HEIGHT 25'-0"



PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

BK CONSULTING ENGINEERS INC
526 Clear Street Montclair, CA 91763
T: 909.569.2566 Email: billking5888@gmail.com

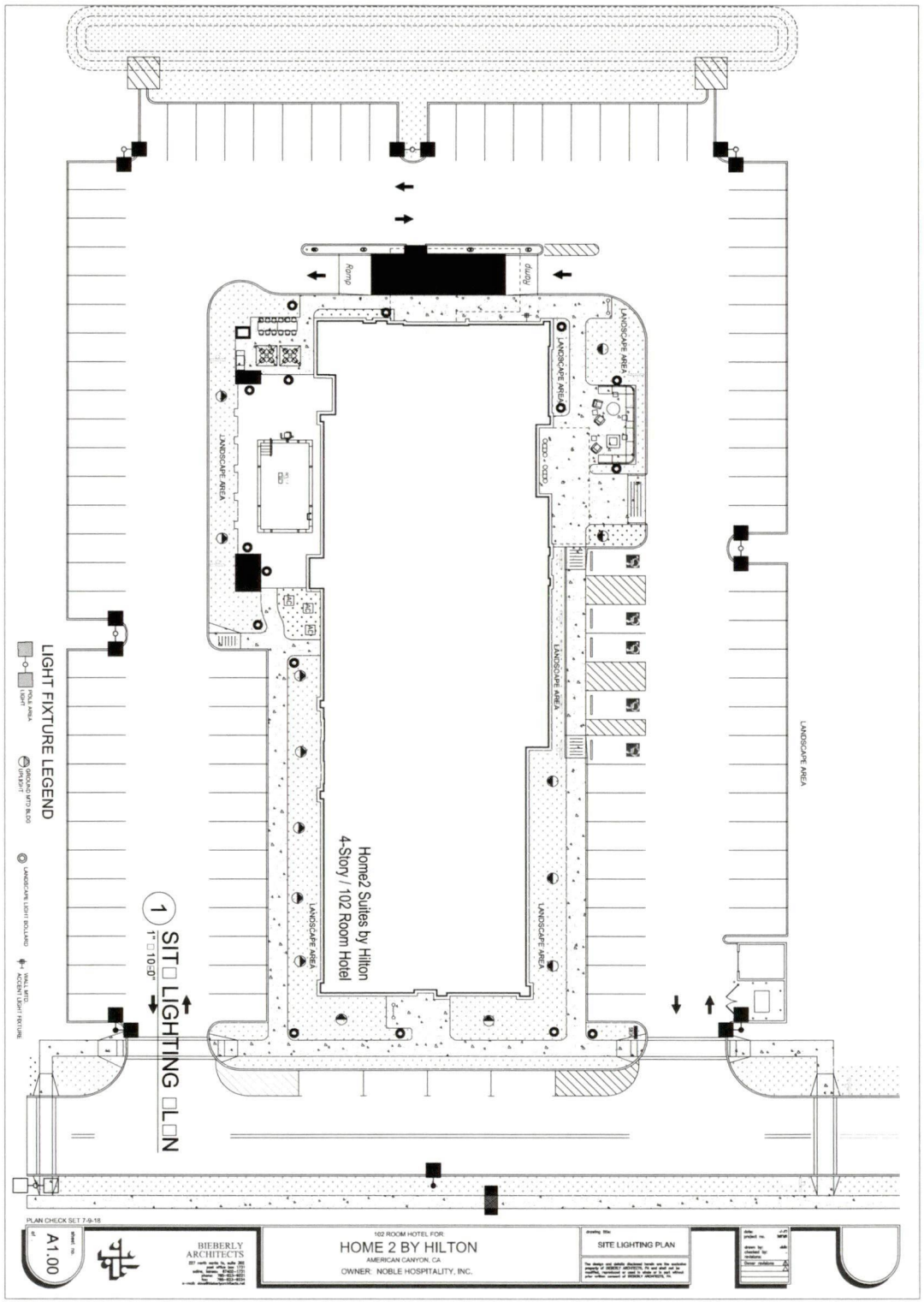
PHOTOMETRIC PLAN

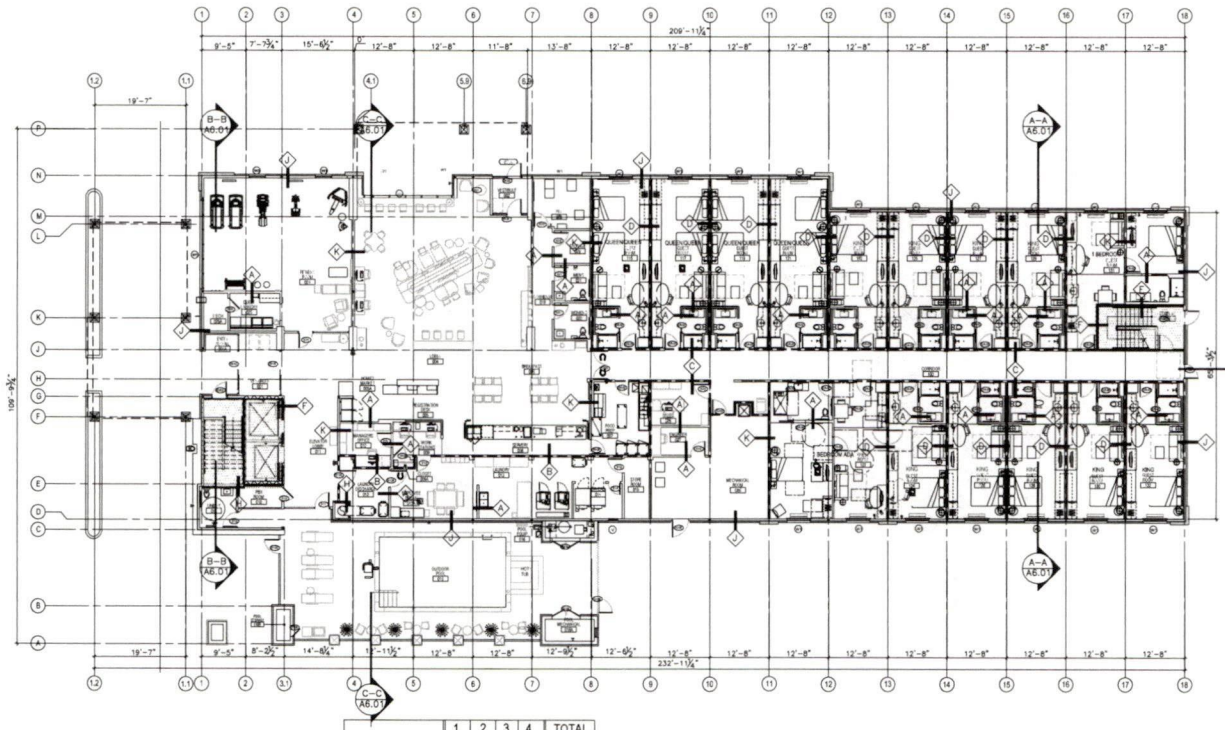
HOME 2 BY HILTON
ATHERTON CANYON / 1

OWNER:

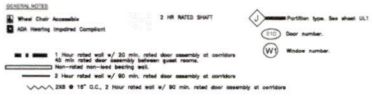
BUTTERFLY ARCHITECTS

E-1


Ramp
Ramp
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
LANDSCAPE AREA
Home2 Suites by Hilton
4-Story / 102 Room Hotel
LIGHT FIXTURE LEGEND
POOL & SPA AREA LIGHT
GROUND MTD BLDG UPLIGHT
LANDSCAPE LIGHT BOLLARD
WALL MTD. ACCENT LIGHT FIXTURE
1 SITE LIGHTING PLAN
1" = 10'-0"
PLAN CHECK SET 7-9-18
A1.00
BIEBERLY ARCHITECTS
102 ROOM HOTEL FOR:
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.
SITE LIGHTING PLAN



	1	2	3	4	TOTAL
KING	9	13	13	13	60
Q/Q	4	13	13	13	31
KING ADA	-	1	1	1	3
Q/Q ADA	-	1	1	1	3
1 BEDROOM	1	1	1	1	4
1 BEDROOM ADA	1	-	-	-	1
TOTAL	15	29	29	29	102



1 FIRST FLOOR PLAN
1/8" = 1'-0"

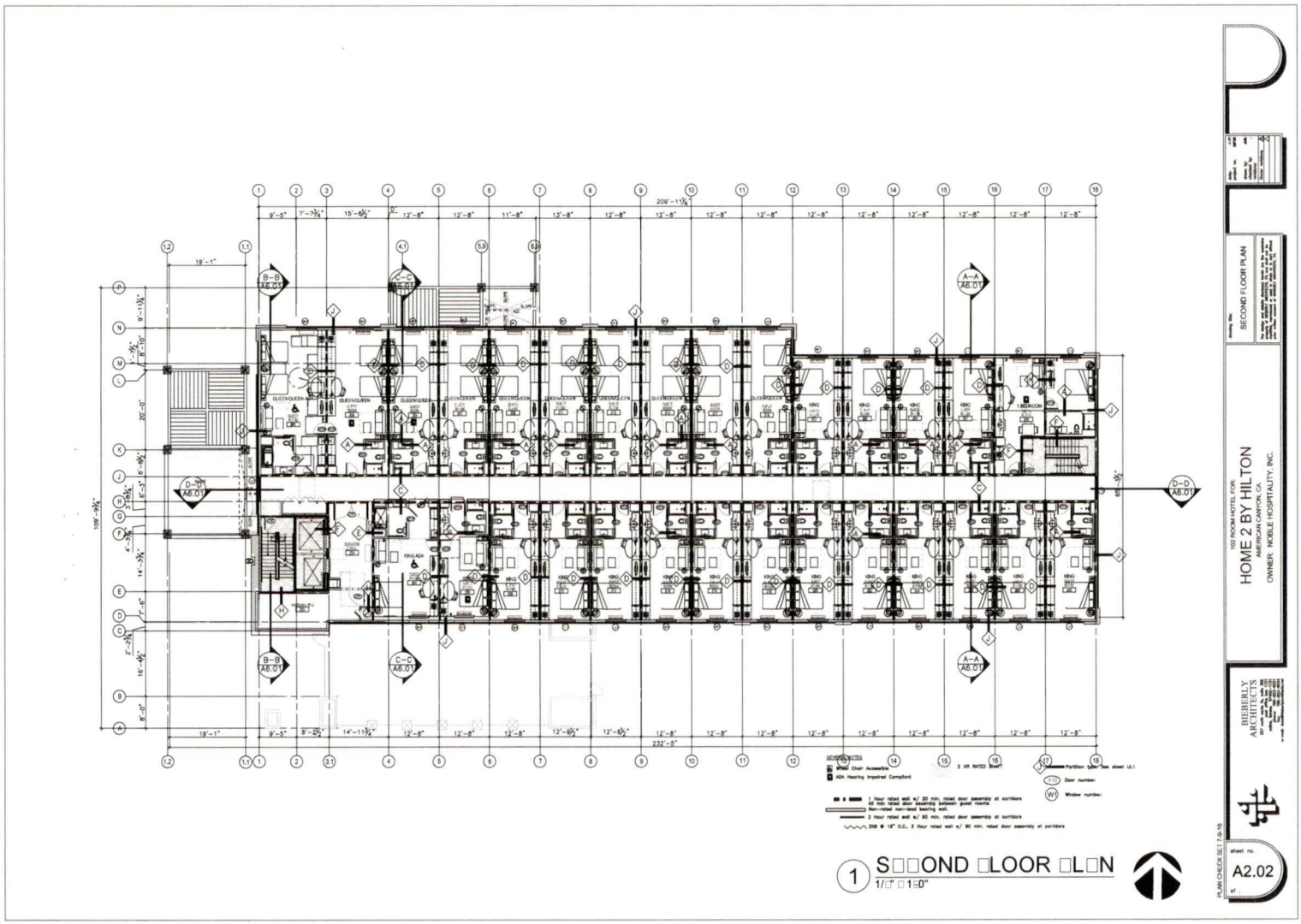
102 ROOM HOTEL FOR
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.

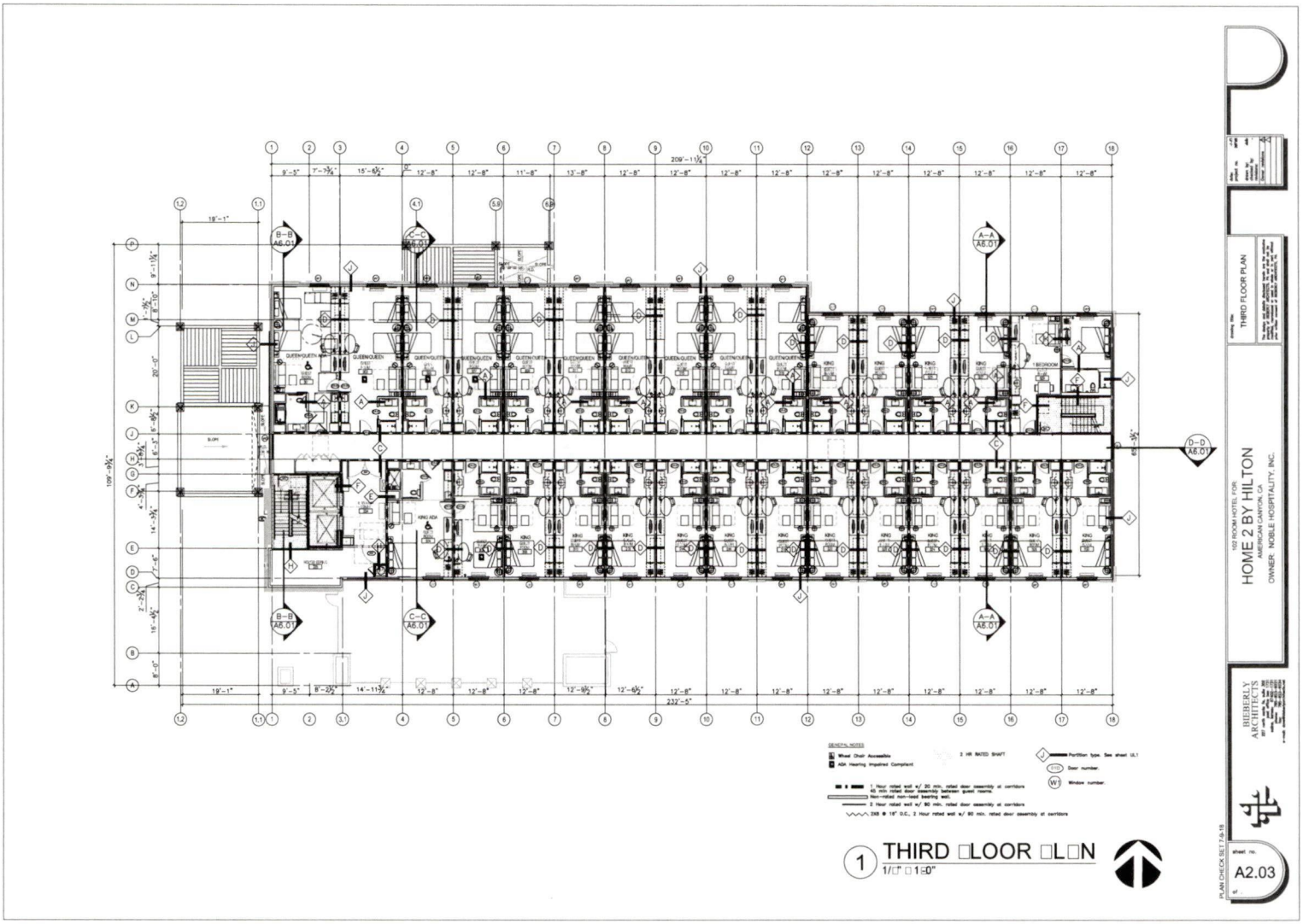
FIRST FLOOR PLAN

BUBBERLY ARCHITECTS

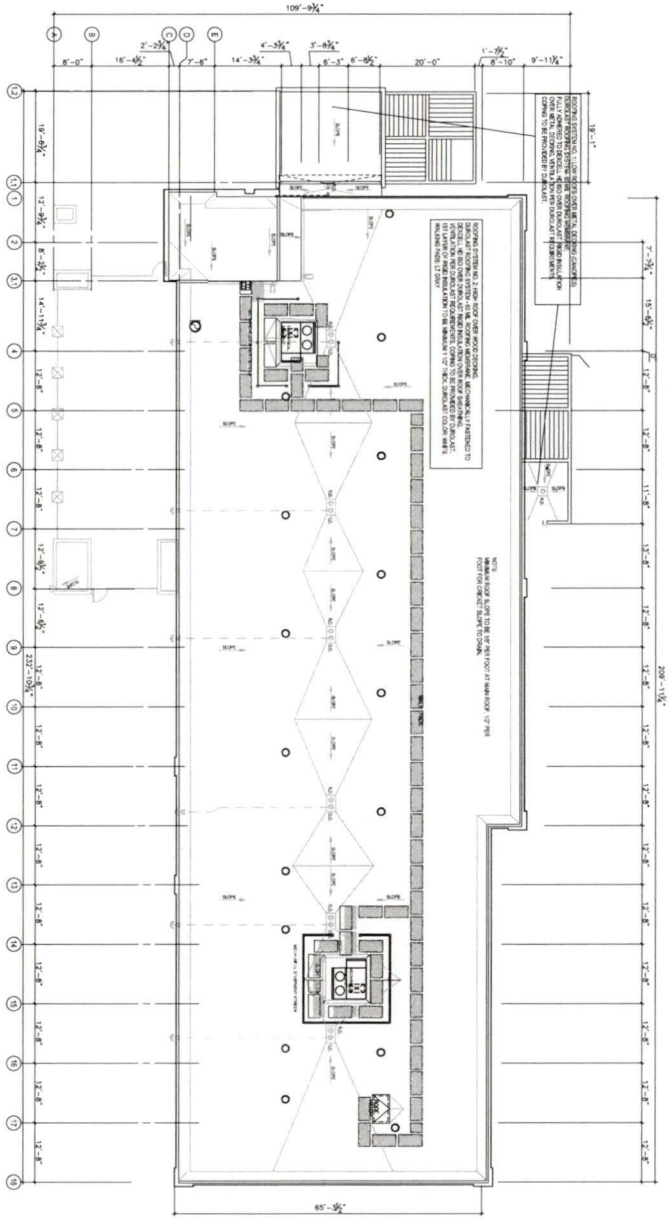
PLAN CHECK SET 7-9-18

sheet no.
A2.01


SECOND FLOOR PLAN
102 ROOM HOTEL FOR
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.
BIEBERLY ARCHITECTS
sheet no.
A2.02
PLAN CHECK SET 7.26.18
1 SECOND FLOOR PLAN
1/8" = 1'-0"


1 THIRD FLOOR PLAN
1/8" = 1'-0"
102 ROOM HOTEL FOR:
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.
THIRD FLOOR PLAN
BIEBERLY ARCHITECTS
PLAN CHECK SET 7-9-18
sheet no.
A2.03

109'-9¾"
8'-0"
16'-4½"
7'-6"
14'-3¾"
6'-3"
6'-8½"
20'-0"
1'-1½"
9'-11¾"
65'-3½"
B-B
A2.0
C-C
A2.0
A-A
A2.0
D-D
A2.0
1
NORTH FLOOR PLAN
1/8" = 1'-0"
PLAN CHECK SET 7-9-18
sheet no.
A2.04
BIEBERLY ARCHITECTS
102 ROOM HOTEL FOR:
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.
drawing title:
FOURTH FLOOR PLAN



1 ROOF PLAN
1/4" = 1'-0"

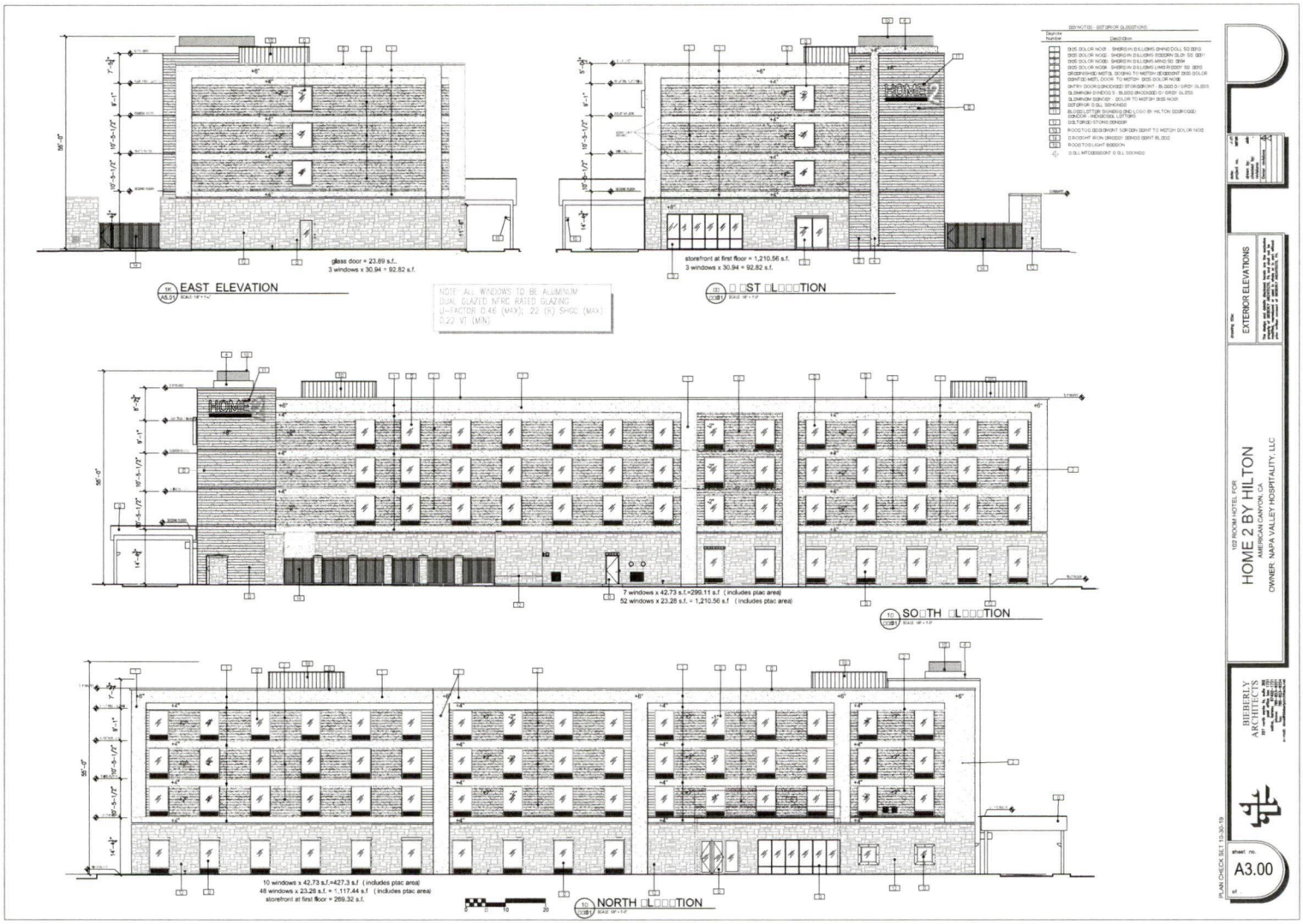
PLAN CHECK SET 7-9-18

A2.05

BIEBERLY ARCHITECTS

102 ROOM HOTEL FOR:
HOME 2 BY HILTON
AMERICAN CANYON, CA
OWNER: NOBLE HOSPITALITY, INC.

ROOF PLAN


glass door = 23.89 s.f.
3 windows x 30.94 = 92.82 s.f.
EAST ELEVATION
NOTE: ALL WINDOWS TO BE ALUMINUM DUAL GLAZED NFRC RATED GLAZING: U-FACTOR: 0.46 (MAX); .22 (E) SHGC (MAX); 0.22 VT (MIN);
storefront at first floor = 1,210.56 s.f.
3 windows x 30.94 = 92.82 s.f.
7 windows x 42.73 s.f.=299.11 s.f (includes ptac area)
52 windows x 23.28 s.f. = 1,210.56 s.f (includes ptac area)
10 windows x 42.73 s.f.=427.3 s.f (includes ptac area)
48 windows x 23.28 s.f. = 1,117.44 s.f (includes ptac area)
storefront at first floor = 269.32 s.f.
HOME 2 BY HILTON
102 ROOM HOTEL FOR
AMERICAN CANYON, CA
OWNER: NAPA VALLEY HOSPITALITY, LLC
EXTERIOR ELEVATIONS
BIEBERLY ARCHITECTS
PLAN CHECK SET 10-30-19
sheet no.
A3.00

Attachment 3

Home2 Suites by Hilton

American Canyon, California

HOTEL PROJECT:

- 4 STORY HOTEL BUILDING, 58,544 sq ft
- 102 SUITES
- 103 PARKING SPACES, INCLUDING ADJACENT STREET AND 16 ELECTRIC CHARGING STATIONS
- FITNESS CENTER
- OUTDOOR POOL & SPA TUB
- OUTDOOR BARBECUE AND RELAXATION AREA
- BUFFET BREAKFAST FOR HOTEL GUESTS
- TWO ELEVATORS

The Home2 Suites by Hilton is a hotel concept that is designed to appeal to extended-stay and more traditional transient travelers alike. The brand is committed to sustainability by incorporating sustainable practices and products to minimize environmental impact and reduce energy consumption.

The all - suites concept features contemporary design and technology elements, studio kitchens with refrigerators, microwaves and dishwashers. A flexible-use space connects separate living and bedroom zones.

Guests can not only choose to enjoy solo comfort in their suite but also to relax, work or connect with other hotel guests at a variety of indoor and outdoor spaces such as:

- The Inspired Table, where a free buffet breakfast is served daily to hotel guests. The hotel does not have a restaurant and will encourage guests to patron local restaurants for lunch and dinner.
- The Oasis, a multifunctional space that morphs from a breakfast area in the morning to a place of work or relaxation throughout the day.
- Spin2 Cycle, where guests can choose to go for a swim or work out while getting a laundry load done in the integrated laundry and fitness facility.
- Saltwater Pool & Spa, designed to provide an attractive outdoor spa-like environment for rest and relaxation.

RECEIVED

JUL 30 2019

City of American Canyon
Community Development

LOBBY AREAS:

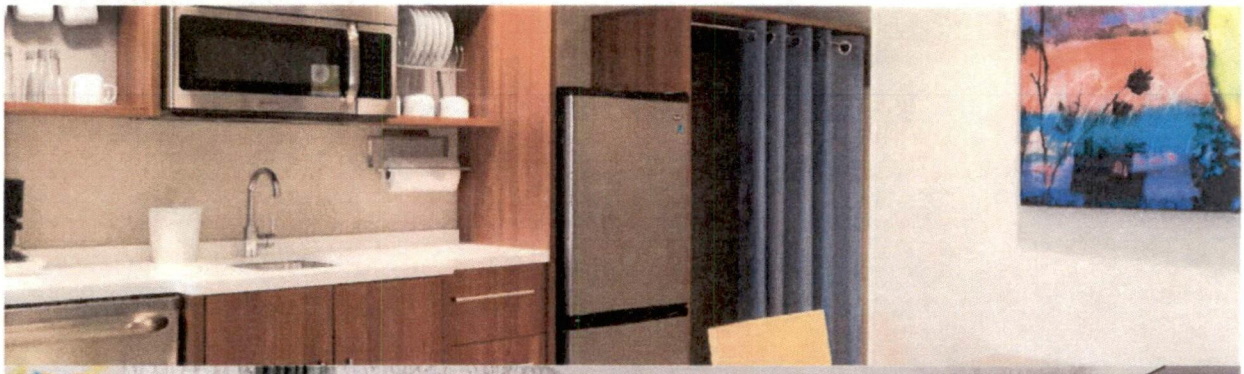


OUTDOOR AREAS:



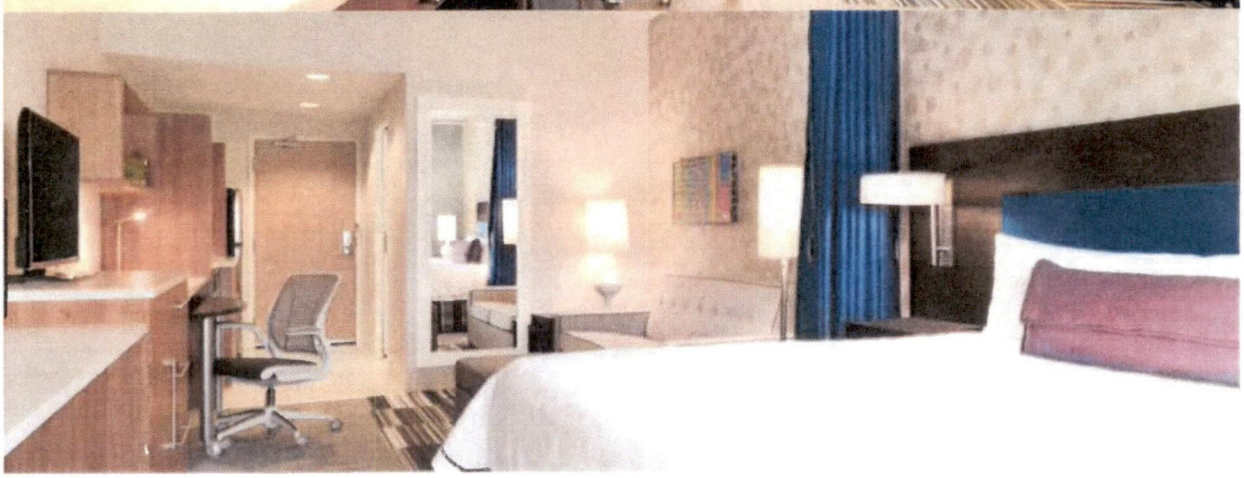


GUEST SUITES:









HILTON
WORLDWIDE

Attachment 4

12/11/19 via Email – mstumm@msn.com

BRENT COOPER
COMMUNITY DEVELOPMENT DIRECTOR
CITY OF AMERICAN CANYON
4381 BROADWAY STREET, SUITE 201
AMERICAN CANYON, CA 94503

RE: H2 Suites by Hilton – American Canyon Napa, CA
Final Parking Count/ Hilton Requirements

Dear Mr. Cooper,

This letter is reference to the proposed and approved parking spaces for the above referenced new hotel development. The developer is currently proposing (102) keys with (101) parking spaces (1 to 1 ratio). This is acceptable to Hilton and has been approved via our formal review.

Please note that based on historical data and site-specific demand, we will approve the reduction of spaces to as low as (90) spaces at .9 per key. This is based on the lack of significant meeting space and food & beverage only provided to guests for breakfast.

Please contact me should you have any questions.

Sincerely,

David Hall

David Hall, Director All Suites
858 261-4915
David.Hall@hilton.com

Attachment 5

City of American Canyon
Community Development Department
4381 Broadway, Suite 201
American Canyon, CA 94503

Environmental Evaluation for SUBSEQUENT ACTIVITY UNDER A PROGRAM EIR (This is not an Initial Study)

SECTION I. Project Information

Project Title and File No:	Home2Suites Hotel Design Permit (PL 19-0023).
Program EIR Name: **EIR State Clearinghouse Number:**	Broadway District Specific Plan Program Environmental Impact Report. #2017042025
Project Location & APN(s):	Located south of 3850 Broadway; APN 059-072-002
Project Applicant:	Napa Valley Hospitality, 5206 Pacheco Blvd, Pacheco, CA 94553
General Plan Designation:	Downtown Core
Zoning:	Broadway District Specific Plan Downtown Core
Description of Project:	A new Home2Suites hotel containing 102 rooms. Construction of site improvements including landscaping, parking lot, utilities, and construction of Main Street extension from the property south frontage to S. Napa Junction Road.
Surrounding Land Uses and Setting:	North: Palby's Junction Office building, single family residential South: Fairfield Suites hotel East: Vacant Property West: Broadway (SR-29)

Prepared by: **William He, Associate Planner** **Date:** **August 15, 2019**
Name, Title

Approved by: **Brent Cooper, Community Dev. Director** **Date:** **January 9, 2020**
Name, Title

SECTION II. Program EIR Checklist

In accordance with Section 15168c of the California Environmental Quality Act (CEQA) Guidelines, the following checklist ensures that all project-related impacts have been addressed in the Program EIR. Mitigation measures identified in the Program EIR are listed for each project-related impact.

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
1. Aesthetics Would the project:				
a) Have a substantial adverse effect on a scenic vista?	Yes/**No**	X		
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	Yes/**No**	X		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Yes/**No**	X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Yes/**No**	X		
2. Agricultural 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?	Yes/**No**	X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Yes/**No**	X		
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	Yes/**No**	X		
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?	**Yes**/No		X	**AIR-2, AIR-3,** AIR-4a, **AIR-4b**

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	**Yes**/No		X	**AIR-2**
c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	**Yes**/No		X	**AIR-3**
d) Expose sensitive receptors to substantial pollutant concentrations?	**Yes**/No		X	AIR-4a, **AIR-4b**
e) Create objectionable odors affecting a substantial number of people?	Yes/**No**	X		
f) Generate direct and indirect GHG emissions?	Yes/**No**	X		
g) Conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHGs?	Yes/**No**	X		
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 Wildlife or U.S. Fish and Wildlife Service?	Yes/**No**		X	BIO-1a, BIO-1b
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 Wildlife or U.S. Fish and Wildlife Service?	Yes/**No**		X	BIO-2
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Yes/**No**		X	BIO-2
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?	Yes/**No**	X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Yes/**No**	X		

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
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?	Yes/**No**	X		
5. Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	**Yes**/No		X	**CUL-1**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	**Yes**/No		X	**CUL-1**
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**Yes**/No		X	**CUL-3**
d) Disturb any human remains, including those interred outside of formal cemeteries?	**Yes**/No		X	**CUL-4**
e) Will subsurface construction activities damage or destroy previously undiscovered tribal cultural resources?	**Yes**/No		X	**CUL-1**
6. Geology and Soils *Would the project:*				
a) Expose people or structures to potential substantial adverse effects associated with seismic hazards.	**Yes**/No		X	GEO-1a, **GEO-1b**
b) Result in substantial soil erosion or the loss of topsoil?	**Yes**/No		X	**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?	Yes/**No**	X		
d) 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?	**Yes**/No		X	**GEO-1b**
7. 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?	Yes/**No**	X		
b) 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?	Yes/**No**	X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes/**No**	X		

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
d) Be located within one-quarter mile of a facility that might reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste?	Yes/**No**	X		
e) Be located on a site of a current or former hazardous waste disposal site or solid waste disposal site unless wastes have been removed from the former disposal site; or 2) that could release a hazardous substance as identified by the State Department of Health Services in a current list adopted pursuant to Section 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?	Yes/**No**	X		
f) Be located on land that is, or can be made, sufficiently free of hazardous materials so as to be suitable for development and use as a school?	Yes/**No**	X		
g) 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 for people residing or working in the project area?	Yes/**No**	X		
h) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	Yes/**No**	X		
i) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Yes/**No**	X		
j) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Yes/**No**	X		
k) Be located within 1500 feet of: (i) an above-ground water or fuel storage tank, or (ii) an easement of an above ground or underground pipeline that can pose a safety hazard to the proposed school?	Yes/**No**	X		
8. Hydrology and Water Quality *Would the project:*				
a) Violate any water quality standards or waste discharge requirements?	**Yes**/No		X	**HYD-1a, HYD-1b**

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	Yes/**No**	X		
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Yes/**No**	X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	Yes/**No**	X		
e) 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?	Yes/**No**	X		
f) Otherwise substantially degrade water quality?	Yes/**No**	X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Yes/**No**	X		
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	Yes/**No**	X		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Yes/**No**	X		
j) Inundation by seiche, tsunami, or mudflow?	Yes/**No**	X		
9. Land Use and Planning *Would the project:*				
a) Physically divide an established community?	Yes/**No**	X		
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Yes/**No**	X		
c) Conflict with the Napa County Airport Land Use Compatibility Plan?	Yes/**No**	X		

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
d) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	Yes/**No**	X		
10. 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?	Yes/**No**	X		
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?	Yes/**No**	X		
11. Noise *Would the project result in:*				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**Yes**/No		X	**NOI-1**
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	**Yes**/No		X	**NOI-2a,** NOI-2b
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes/**No**	X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes/**No**	X		
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 expose people residing or working in the project area to excessive noise levels?	Yes/**No**	X		
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	Yes/**No**	X		
12. Population and Housing *Would the project:*				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	Yes/**No**	X		
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Yes/**No**	X		
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	Yes/**No**	X		

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
13. 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?	Yes/**No**	X		
b) Police Protection?	Yes/**No**	X		
c) Schools?	Yes/**No**	X		
d) Parks?	Yes/**No**	X		
e) Other public facilities?	Yes/**No**	X		
14. 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?	Yes/**No**	X		
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?	Yes/**No**	X		
15. Transportation/Traffic *Would the project:*				
a) Would the Project from an "Existing Plus Background Plus Proposed Specific Plan Traffic" perspective 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?	Yes/**No**	X		
b) Would the Project from a "Cumulative" Traffic perspective 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?	Yes/**No**	X		
c) Conflict with applicable congestion management program?	Yes/**No**	X		

Checklist Issues:	Project Related Impact (Bold and Underline)	Impact DOES NOT require mitigation through EIR analysis	Impact DOES require mitigation through EIR analysis**	Assigned Mitigation measures (Bold and Underline)
d) Alter air traffic patterns?	Yes/**No**	X		
e) Create hazards associated with design features or incompatible uses, or result in inadequate emergency access?	Yes/**No**	X		
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Yes/**No**	X		
16. Utilities and Service Systems *Would the project:*				
a) Require additional water supply entitlements?	Yes/**No**	X		
b) 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?	Yes/**No**	X		
c) Create the need for new or expanded downstream storm drainage facilities?	Yes/**No**	X		
d) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Yes/**No**	X		
e) Result in the inefficient, wasteful or unnecessary consumption of energy?	Yes/**No**	X		

**The list of "Assigned Mitigation Measures" include *Project Design Features (PDF), Existing Plans, Programs, and Policies (PPP), and Mitigation Measures.* Similar to Mitigation Measures, PDFs and PPPs are project requirements that reduce potential significant impacts of the project

SECTION III. Applicability of CEQA Guidelines Sections 15162 and 15163

	YES	NO
1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.		X
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 negative declaration due to the involvement of new significant environmental effects of a substantial increase in the severity of previously identified significant effects; or		X
3. New information of substantial importance to the project becomes available; and		
A. The information was not known and could not have been known with the exercise of reasonable diligence at the time of the previous EIR was certified as complete, shows any of the following:		X
(1) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;		X
(2) Significant effects previously examined will be substantially more severe than shown in the previous EIR;		X
(3) 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		X
(4) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.		X

SECTION IV. Findings

	YES	NO
1. The project has effects that were not examined in the EIR; therefore, an Initial Study needs to be prepared leading to either an EIR or a negative Declaration.		X
2. The agency finds that pursuant to Section 15162, no new effects will occur or no new mitigation measures will be required. The agency can approve the project as being within the scope of the project covered by the EIR, and no new environmental document is required.	X	

CITY OF AMERICAN CANYON
COMMUNITY DEVELOPMENT DEPARTMENT

Applicant Confirmation of Conditions of Approval
Design Permit and Minor Variation Permit for Napa Valley Hospitality, LLC at APN 057-072-002 (File No. PL 19-0023)

As shown by my signature below, I confirm that I understand and agree to abide by the conditions of approval included in the Design Permit and Minor Variation approval PL19-0023 dated January 23, 2020.

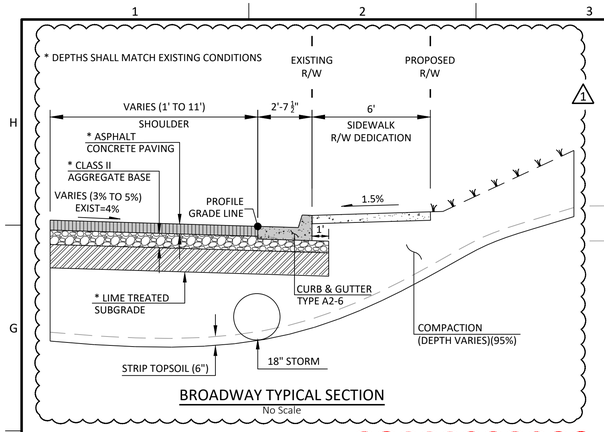
Applicant's signature — Date: 07/12/20

MOHD KARIM SAYANI (NAPA Valley Hospitality)
Applicant's name printed

Property Owner's signature — Date: 07/12/20

MOHD KARIM SAYANI
Property Owner's name printed

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



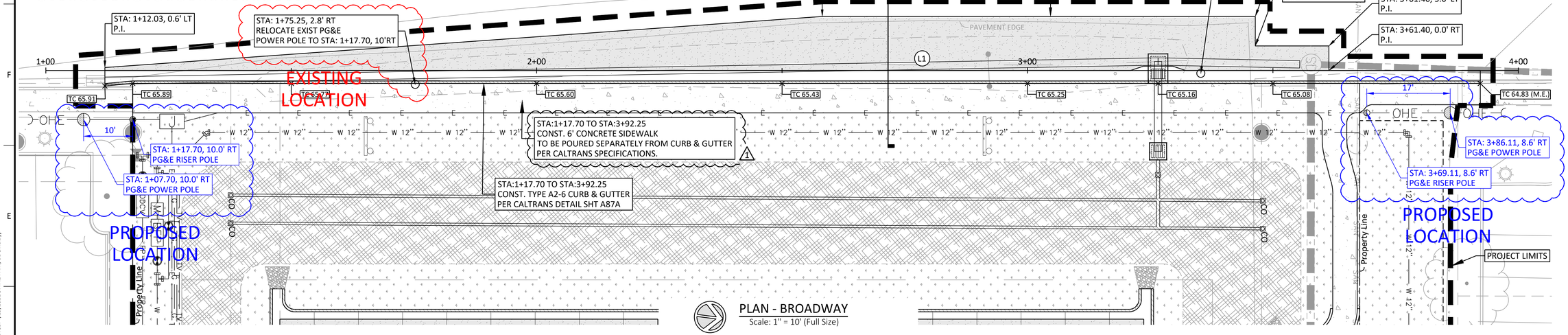
BROADWAY TYPICAL SECTION
No Scale

BROADWAY CURB ALIGNMENT CONTROL (EDGE OF CURB)				
NUMBER	BEGIN STATION	END STATION	BEGIN COORDINATES	END COORDINATES
L1	1+00.00	4+00.00	N: 1825904.73 E: 6488669.18	N: 1826202.28 E: 6488630.90

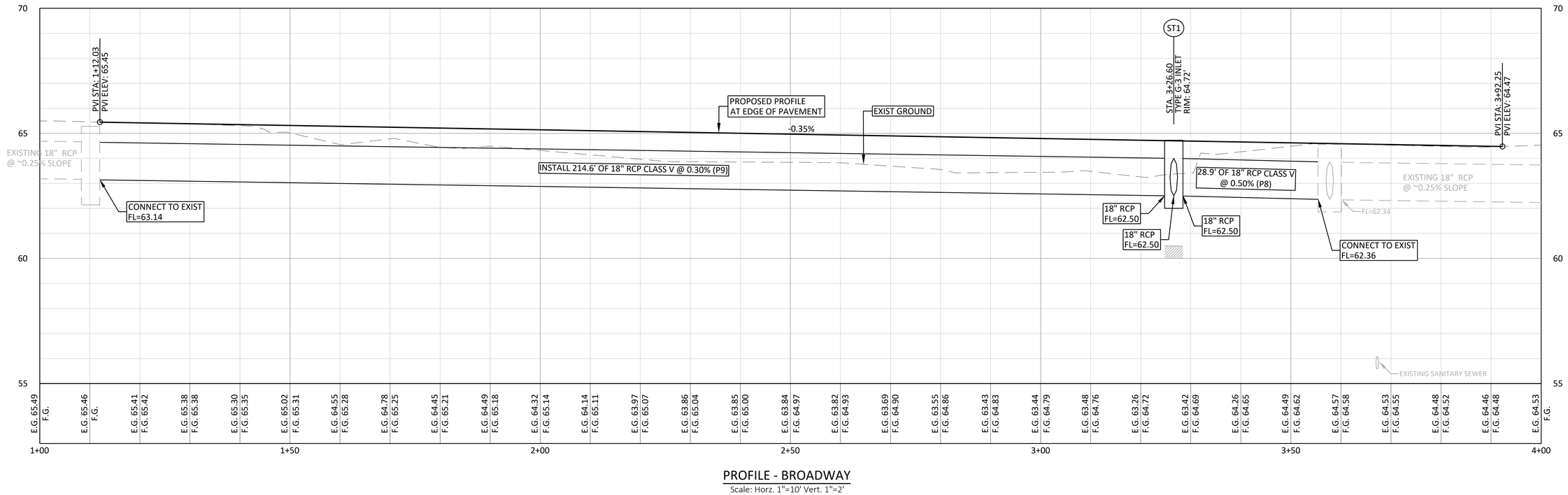
NOTE:
1. FOR CLARITY, ITEMS REMOVED AS SHOWN ON REMOVAL SHEET C3 ARE NOT SHOWN.
2. CONTRACTOR SHALL SETUP TRAFFIC CONTROL TO COMPLY WITH CALTRANS STANDARD DETAILS & SPECIFICATIONS. SEE SHEET C36 FOR DETAILS.
3. THESE IMPROVEMENTS REQUIRE CALTRANS RIGHT-OF-WAY ENCROACHMENT PERMIT. CONTRACTOR IS RESPONSIBLE TO OBTAIN ENCROACHMENT PERMIT

Attachment 2

DRAWING IS AT INTENDED SCALE WHEN BAR BELOW MEASURES 2"
0 10 20
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2' (0 to 2)



PLAN - BROADWAY
Scale: 1" = 10' (Full Size)



PROFILE - BROADWAY
Scale: Horz. 1"=10' Vert. 1"=2'

NO.	DATE	REVISIONS
1	06/29/21	REVISION #1

BROADWAY - PLAN & PROFILE

HOME2 SUITES
DEVELOPMENT PLAN
AMERICAN CANYON, CALIFORNIA

benesch
Alfred Benesch & Company
7979 E. Tufts Avenue, Suite 800
Denver, Colorado 80237
Ph: 303.771.6868 Job No. - 130652.00

QUANTITIES N/A
RECEIPT
REVIEWED BW
BY
DESIGNED BDT
BY
DRAWN BDT
BY

PROJECT
HOME2 SUITES
DATE
MARCH 26, 2021
SHEET NO.
C27

[File Location: Y:\Manhattan\130600S\130652.00_Hotel_California\Eng_Docs\Exhibits\Relocate Broadway PGE Pole\130652DD BROADWAY - PLAN & PROFILE.dwg] [Plot Date: 5/5/2022 1:07:11 PM] [Last Saved: 4/29/2022 9:47:24 AM: Btremblay]

For Visualization Purpose Only

Overhead

Main Pole

Riser Pole

Approx Property Line

Exist.
Maintenance
Road

Approx Property Line

17' +/-

Google Earth

© 2022 Google

For Visualization Purpose Only

Overhead

Riser Pole

Main Pole

Approx Property Line

10' +/-

Google Earth

© 2022 Google

Overhead Utility Poles on Broadway

ATTACHMENT 8

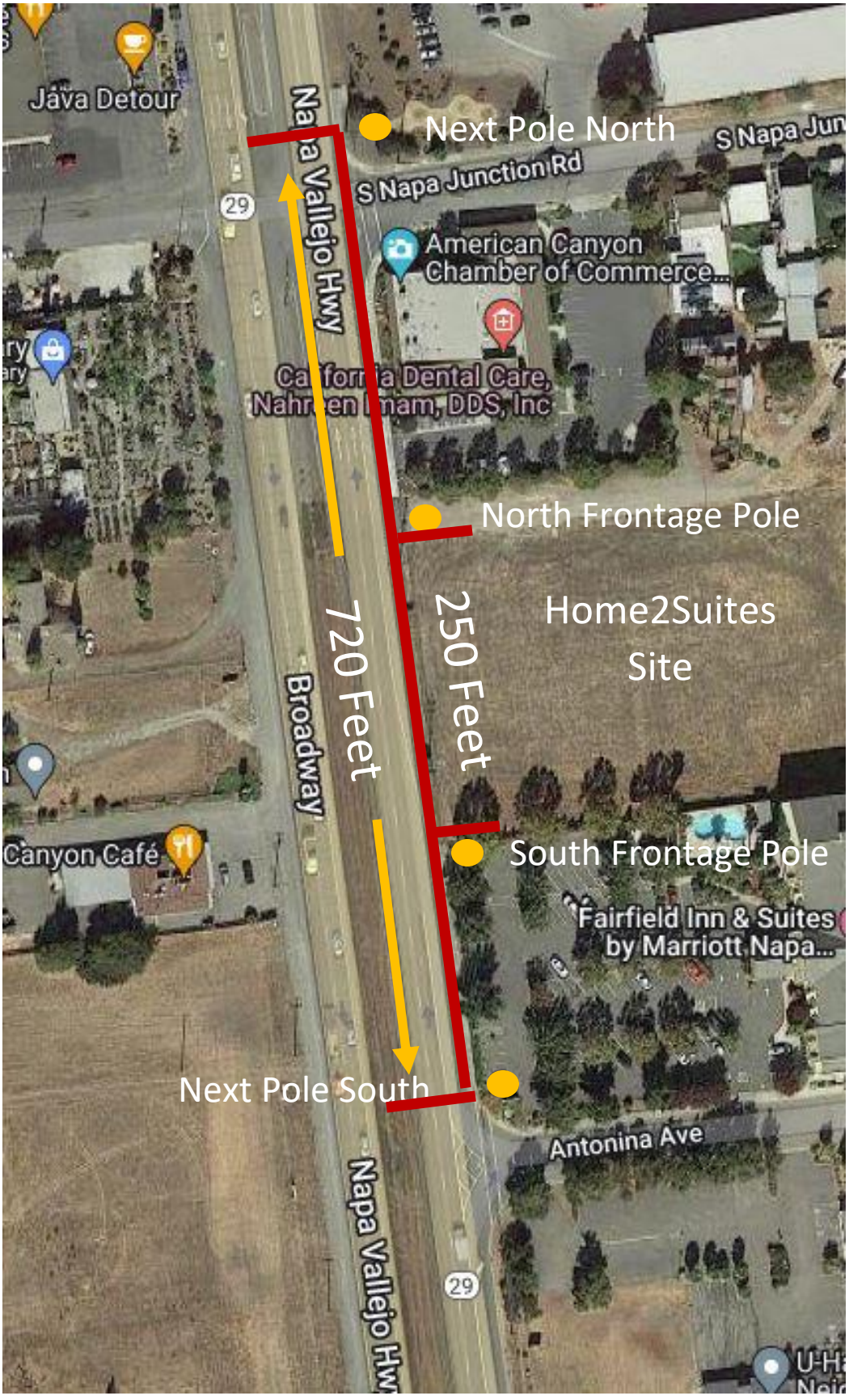
Existing Conditions



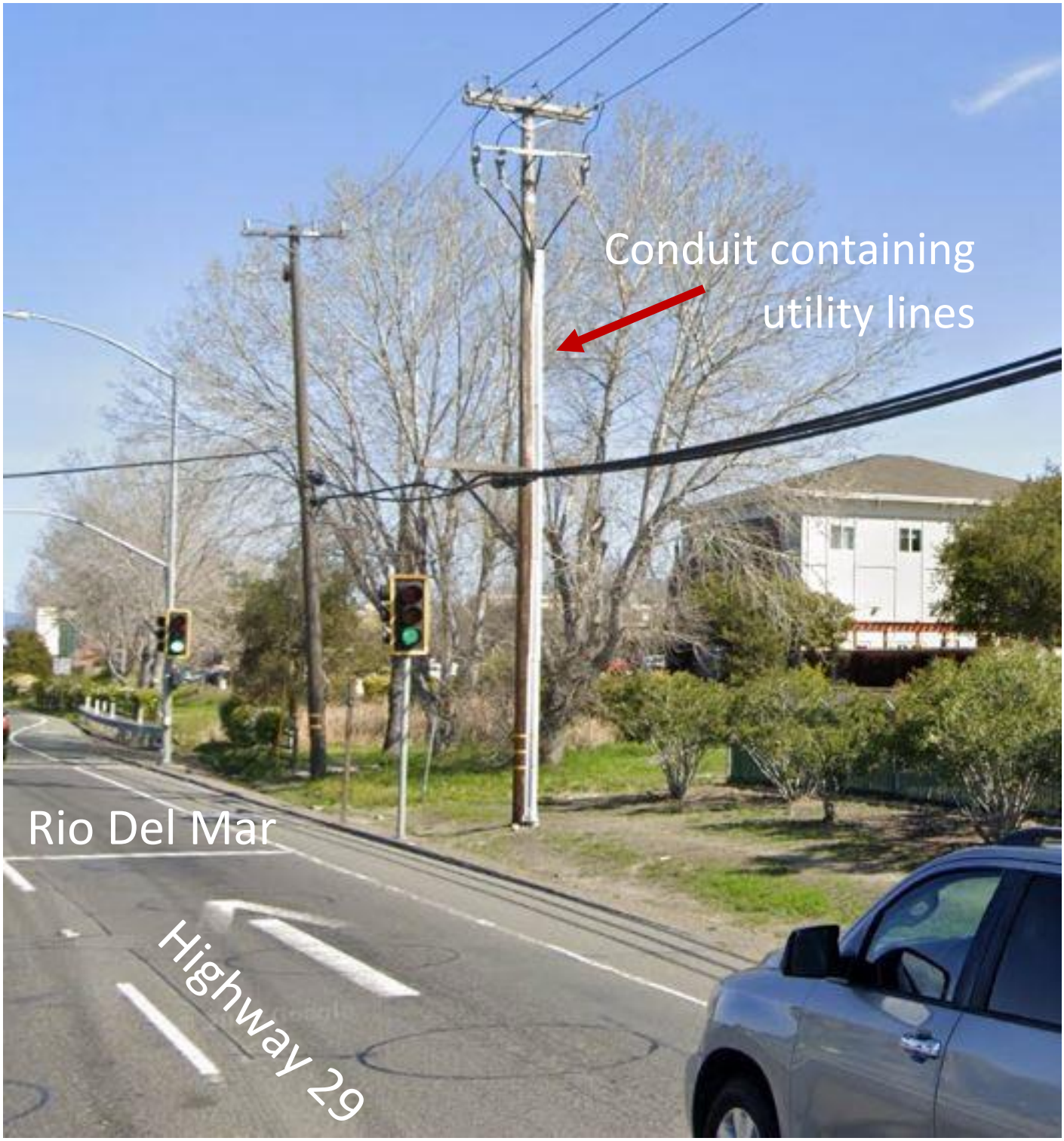
Illustration of “After” Conditions



Overhead Pole Locations



"Riser" Pole Example



From: Molake Jr., Habideen
To: William He; "btremblay@benesch.com"; "MARK STUMM"
Cc: Brent Cooper; Edison Bisnar
Subject: RE: [External] PG&E Project Status Update for Home2 Suites - American Canyon
Date: Thursday, June 16, 2022 2:00:54 PM
Attachments: image001.png
image002.png

Hello William,

Undergrounding overhead wire will always require a primary riser pole at each end of the span to be undergrounded. In some cases, there is opportunity to for an existing pole(s) to be used as primary riser poles but that is not possible here due to the facilities/equipment that is currently on the poles in place now. We too try and limit the amount of infrastructure that is installed where possible but this can be challenging when it comes to undergrounding distribution facilities.

I will not be available to meet with the Planning Commission next Thursday but I'm available any time (Mon-Fri, 7am-330pm) before or after the call to answer any questions yourself or the Commission may have.

Thanks

From: William He <whe@cityofamericancanyon.org>
Sent: Thursday, June 16, 2022 12:28 PM
To: Molake Jr., Habideen <HAMF@pge.com>; 'btremblay@benesch.com' <btremblay@benesch.com>; 'MARK STUMM' <mstumm@msn.com>
Cc: Brent Cooper <bcooper@cityofamericancanyon.org>; Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Subject: FW: [External] PG&E Project Status Update for Home2 Suites - American Canyon

*****CAUTION: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.*****
Hello Habideen,

I am working on the Home2 Suites undergrounding project in American Canyon. The most recent design proposal consists of undergrounding approximately 250' of overhead utilities at the western frontage, relocating 2 existing utility poles and adding two riser poles offsite.

I have a question regarding the need for the riser poles. Can the undergrounding be done with just the relocated poles? I checked in with Bret this morning and he said it's a technical issue and best to contact you for the details. We have seen undergrounding on other sites in town, where the undergrounding did not require riser poles (for example, see the frontage at the Double Tree Hotel at 3600 Broadway St).

Also, are you available to join us for the Planning Commission meeting next Thursday (6/23 at 6:30 PM)? This is a virtual meeting conducted by Zoom. We would appreciate your attendance.

Kind regards,

William He, AICP
Associate Planner, Community Development Department
City of American Canyon | 4381 Broadway Street, Suite 201 | American Canyon, CA 94503
707 647 4337 | whe@cityofamericancanyon.org
www.cityofamericancanyon.org

From: Tremblay, Bret
Sent: Friday, May 6, 2022 4:27 PM
To: Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Cc: MARK STUMM <mstumm@msn.com>; HAMF@pge.com; Waller, Brad <BWaller@benesch.com>; Epp, William <WEpp@benesch.com>; Dave Bieberly (dave@bieberlyarchitects.net) <dave@bieberlyarchitects.net>; Erica Ahmann Smithies <esmithies@cityofamericancanyon.org>; Brent Cooper <bcooper@cityofamericancanyon.org>
Subject: RE: [External] PG&E Project Status Update for Home2 Suites - American Canyon

Edison –

Per our last coordination there was changes needed/requested on the PG&E pole locations in regards to undergrounding along the property frontage and we met w/ PG&E and discussed different options and have provide the attached layout for your review.

Could we request some preliminary feedback if this would an acceptable option to go, and then PGE can provide a final design upon that.

Thanks,

From: Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Sent: Tuesday, February 22, 2022 11:08 AM
To: Tremblay, Bret <BTremblay@benesch.com>
Cc: MARK STUMM <mstumm@msn.com>; HAMF@pge.com; Waller, Brad <BWaller@benesch.com>; Epp, William <WEpp@benesch.com>; Dave Bieberly (dave@bieberlyarchitects.net) <dave@bieberlyarchitects.net>
Subject: RE: [External] PG&E Project Status Update for Home2 Suites - American Canyon

Hi Bret,

Thank you for sending the revised PG&E layout. We will review. I will get back to you as soon as I can.

Thanks,

Edison C. Bisnar, Jr. PE
Engineer III, Public Works Department
City of American Canyon | 4381 Broadway, Suite 201 | American Canyon, CA 94503
707 647 4588 |
www.cityofamericancanyon.org

From: Tremblay, Bret <BTremblay@benesch.com>
Sent: Tuesday, February 22, 2022 8:49 AM
To: Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Cc: MARK STUMM <mstumm@msn.com>; HAMF@pge.com; Waller, Brad <BWaller@benesch.com>; Epp, William <WEpp@benesch.com>; Dave Bieberly (dave@bieberlyarchitects.net) <dave@bieberlyarchitects.net>
Subject: RE: [External] PG&E Project Status Update for Home2 Suites - American Canyon

Edison – Please see attached most current layout from PG&E. The area highlighted in yellow I placed showing the underground portions.

The far northwest corner where the poles are still along the frontage has been kept to a minimum, but my understanding from PGE is these are not able to moved due to other connection points. What also is shown is the undergrounding that extends past the property line to the south, so the total amount of undergrounding does exceeds the length of frontage.

Can a variance be submitted for this?

Thanks,

Bret Tremblay
Senior Technical Specialist | Associate

btremblay@benesch.com
direct: 785-320-4815 **mobile:** 785-675-1063 **office:** 785-539-2202

---

benesch

From: Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Sent: Thursday, February 10, 2022 3:52 PM
To: Tremblay, Bret <BTremblay@benesch.com>
Cc: MARK STUMM <mstumm@msn.com>; HAMF@pge.com; Waller, Brad <BWaller@benesch.com>; Epp, William <WEpp@benesch.com>; Dave Bieberly (dave@bieberlyarchitects.net) <dave@bieberlyarchitects.net>
Subject: RE: [External] PG&E Project Status Update for Home2 Suites - American Canyon

Hi Bret,

The exhibit shows pole #1 still to remain and instead a new pole will be installed next to it. This does not conform to Condition #40 (see below). Please revise the exhibit to comply with Condition 40.

> 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.

Thanks,

Edison C. Bisnar, Jr. PE
Engineer III, Public Works Department
City of American Canyon | 4381 Broadway, Suite 201 | American Canyon, CA 94503
707 647 4588 |
www.cityofamericancanyon.org

CITY OF AMERICAN CANYON

From: Tremblay, Bret <BTremblay@benesch.com>
Sent: Wednesday, February 9, 2022 12:30 PM
To: Edison Bisnar <Ebisnar@cityofamericancanyon.org>
Cc: MARK STUMM <mstumm@msn.com>; HAMF@pge.com; Waller, Brad <BWaller@benesch.com>; Epp, William <WEpp@benesch.com>; Dave Bieberly (dave@bieberlyarchitects.net) <dave@bieberlyarchitects.net>
Subject: FW: [External] PG&E Project Status Update for Home2 Suites - American Canyon

Edison –

Coordination w/ PGE and they have provided information regarding their final layout for undergrounding. See attached markup provided. The exterior poles services (Pole 1 & 3 in the attache) provide service existing light and transformer across the street so they will be setting new poles next to them and underground between. This generates a total undergrounding of 330’ +/-.

Let me know if you have any questions. I have copied Habideen w/ PGE.

Thanks,

Bret Tremblay
Senior Technical Specialist | Associate

btremblay@benesch.com
direct: 785-320-4815 **mobile:** 785-675-1063 **office:** 785-539-2202

benesch

From: Molake Jr., Habideen <HAMF@pge.com>
Sent: Thursday, January 06, 2022 5:26 PM
To: MARK STUMM <mstumm@msn.com>
Cc: Karim Sayani <ksayani1@gmail.com>; Dave Bieberly <dave@bieberlyarchitects.net>; Tremblay, Bret <BTremblay@benesch.com>
Subject: RE: PG&E Project Status Update for Home2 Suites - American Canyon

Hello Mark,

The attached markup shows the two new necessary primary riser poles in their general locations. Pole 2 to be removed has a transformer the feeds to the streetlight in question on pole 3.

Pole 1 and Pole 3 need to remain in place due to the guying configuration in which they're supported.

Thanks

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/ [cityofamericancanyon.org]

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This message has originated from an **External Source**. Please use proper judgment and caution when opening attachments, clicking links or responding to this email.

TITLE

Giovannoni Logistics Center Draft Environmental Impact Report (DEIR) Public Review Workshop

RECOMMENDATION

Receive and file Giovannoni Logistics Center DEIR and provide comments on its environmental findings and conclusions.

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

PROJECT DESCRIPTION

The applicant, Buzz Oates LLC, is proposing a 2.4 million square foot logistics center in two phases. Bisected by Devlin Road, the site is located north of Green Island Road on approximately 208-acres. Industrial development would occur on 161 acres. The remaining 47 acres would be preserved as open space. The project site is designated "Industrial" by the General Plan and zoned "General Industrial." The project site is within the boundaries of the Napa County Airport Land Use Compatibility Plan.

Land uses surrounding the project include:

- **North** - Devlin Road and the Napa Logistics Park form the northern boundary of the project site. Further north is the Napa County Airport;
- **South** - Green Island Road, Crown Hill Stone Supply, and the Wine Direct warehouse form the southern boundary of the project site. Further south are industrial and commercial businesses within the Green Island Business Park;
- **East** - The Napa Branch Line, a railroad that connects American Canyon and Napa, forms the eastern boundary of the project site. East of the branch line are several industrial and commercial businesses that front State Route (SR) 29; and
- **West** - The California Northern Railroad line connecting American Canyon and Sonoma and the Biagi Brothers distribution warehouse form the western boundary of the project site.

A Regional Location map is included as Attachment 1. A Vicinity Map is included as Attachment 2.

Photographs of the site are included as Attachment 3.

The applicant developed design-level site plans for Phase 1, which includes a 94.7-acre area east of Devlin Road. This area accommodates two high-cube warehouse buildings totaling 1,069,904 square feet. Each building would provide docks, grade level roll-up doors, and trailer parking stalls. The facility would be enclosed with a secure perimeter and access would be restricted to authorized users. One building would be rail-served by the adjacent Napa Branch Railroad Line. A site plan for Phase 1 is included as Attachment 4. Photosimulations of the proposed warehouse buildings are included as Attachment 5.

Phase 2 of the proposed project would occur on a 113.1-acre area west of Devlin Road. This area is conceptually proposed for the remaining 1.3 million square feet of high-cube warehouse. All together, the proposed project would employ an estimated 1,200 workers during construction and an estimated 3,643 workers at buildout.

For the purposes of the Draft EIR impact assumptions, Phase 1 and 2 would be developed concurrently over 18 months. As a practical matter, the proposed project would build out over a period of years or decades. Phase 1 would be developed first, followed by Phase 2.

Draft EIR Commission Review

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

FirstCarbon Solutions prepared the Draft Environmental Impact Report (Draft EIR). FirstCarbon Solutions will review the Draft EIR findings and mitigations and seek Commission and public input on the Draft EIR. The Draft EIR provides a project-level analysis for the proposed project. The City of American Canyon is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The Draft EIR is intended to address all public infrastructure improvements and all future development within the parameters of the proposed project.

Public comment on the Draft EIR is invited for an extended 62-day period from May 20, 2022 through July 20, 2022. During the public review period, the Draft EIR, including the technical appendices, is available for review at the City of American Canyon Community Development Department offices and the American Canyon Library. A copy of the Draft EIR is included as Attachment 6. The Draft EIR and Appendices are available on the City's website at this address: https://www.cityofamericancanyon.org/government/community-development/development-projects.

For this presentation, the Planning Commission does not take any specific action. The Commission receives a presentation about the project and the Draft EIR, invites questions and comments from the public, and provides its own questions and comments about the project and the Draft EIR. This presentation of the Project and the Draft EIR has been scheduled during the extended 62-day public review period to provide an opportunity for interested persons to become more familiar with the project and with the findings of the Draft EIR.

At the end of the public review period, all public comments will be assembled and staff and the EIR consultant will prepare a written response to each comment. This document is called the "Response to Comments" (RTC). The Final EIR is made up of the Draft EIR together with the RTC. The RTC will be released at least ten days before the Planning Commission holds a public hearing on the Final EIR.

At a subsequent meeting, the Planning Commission will consider whether to recommend that the City Council:

1. Certify the Final EIR as having adequately evaluated all required environmental considerations; and
2. What actions to take on the Giovannoni Logistics Center Project.

Project Objectives

The objectives of the proposed project are to:

1. Promote economic growth in American Canyon by attracting new industries.
2. Promote development that that generates net positive tax revenues for the City by generating more in new tax revenues than are consumed by City expenditures on services provided to the development.
3. Create new employment opportunities for residents of Napa County and the surrounding region.
4. Develop compatible land uses near the Napa County Airport in the interests of avoiding interference with aviation operations.
5. Improve American Canyon's jobs-housing ratio by adding new employment opportunities.
6. Continue the orderly development of the Devlin Road corridor with a well-designed project.
7. Further the goals and policies of the City of American Canyon General Plan by developing land contemplated to support urban development to its highest and best use.
8. Preserve the most biologically sensitive portions of the project site as open space.
9. Install circulation improvements along Green Island Road and Devlin Road that provide efficient ingress and egress to the proposed project while also ensuring these facilities operate at acceptable levels.
10. Promote public safety by incorporating security measures into the project design.
11. Mitigate impacts on the environment through implementation of feasible mitigation measures.

Sustainability Features

The proposed project would incorporate a variety of sustainable materials and construction practices including:

- Covered bicycle parking
- California Green Building Code compliant electric vehicle charging stations at seven locations. The application of United States Green Building Council Leadership in Energy and Environmental Design (LEEDTM) techniques and practices to the project design and construction.
- Roof structures designed to accommodate additional weight for roof-top photovoltaic electricity generation panel arrays.
- A stormwater pollution prevention plan to minimize contamination, erosion, and dust pollution during construction. All stormwater runoff from impervious surfaces (roofs and paving) will be routed through a specially designed water quality detention and treatment basin. Additionally, on-site detention will be provided to meet the City of American Canyon standards.
- Storage and collection of recyclable materials.
- Construction waste management including recycling.
- Environmental tobacco smoke control.
- Heat reflecting roof membranes.
- Light pollution reduction.
- Water-efficient landscaping.
- Water use reduction methods.
- Low volatile organic compound (VOC) emitting sealants, adhesives, coatings, floorings, and wood materials.

SUMMARY OF ENVIRONMENTAL IMPACTS

Environmental Issues Determined not to be Significant

The Draft EIR identifies topical areas that were determined not to be significant. An explanation of the reasons why each area is determined not to be significant is provided in Chapter 7, Effects Found not to be Significant. These topical areas are as follows:

- Agriculture and Forest Resources
- Mineral Resources
- Population and Housing
- Recreation
- Wildfire

In addition, certain subjects with various topical areas were determined not to be significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are

not analyzed:

- State Scenic Highways
- Septic or Alternative Wastewater Disposal Systems
- Exposure of Schools to Hazardous Materials
- Private Airstrips
- Emergency Response or Evacuation Plan
- Wildland Fire
- Levee or Dam Failure
- Seiches, Tsunamis, or Mudflows
- Division of an Established Community
- Schools
- Parks
- Other Public Facilities

An explanation of the reasons why each issue is determined not to be significant is provided in Chapter 7, Effects Found Not to be Significant.

Potentially Significant Environmental Issues

The Notice of Preparation found that the following topical areas may contain potentially significant environmental issues that will require further analysis in the Draft EIR. These sections are as follows:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utility Systems

Summary of Mitigation Measures

CEQA Guidelines §15126.4(a) requires lead agencies to consider feasible mitigation measures to avoid or substantially reduce a project's significant environmental impacts. A table that identifies all proposed mitigation measures is included as Attachment 6.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts even after implementing mitigation measures:

- Consistency With Air Quality Management Plan: The proposed project would result in exceedances of regional emissions thresholds and, therefore, be inconsistent with the Bay Area Air Quality Management District (BAAQMD) regional air quality planning assumptions. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reconcile this inconsistency. Therefore, the significance after mitigation is significant and unavoidable.
- Cumulative Criteria Pollutant Emissions Impacts: The proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable federal or State ambient air quality standard. Mitigation is proposed requiring the implementation of air emissions reduction measures, but it would not fully reduce this impact to a level of less than significant. Therefore, the significance after mitigation is significant and unavoidable.

Summary of Project Alternatives

According to CEQA, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives, and would avoid or substantially lessen any of the proposed project's significant effects. Additionally, a "No Project" alternative must be analyzed (Section 15126.6 of the CEQA Guidelines). Listed below are the Project Alternatives for this Draft EIR:

Alternative 1: No Project/No Development
The proposed project would not be pursued, and the project site would remain undeveloped for the foreseeable future. This alternative would avoid all the proposed project's significant impacts.

Alternative 2: No Project/Existing General Plan
A 2.4 million square-foot food and beverage facility would be developed on the project site. The project boundaries would remain the same as the proposed project. This alternative would increase the severity of all the proposed project's significant impacts.

Alternative 3: Reduced Density
A 1.6-million-square-foot logistics center would be developed on the project site, which represents a 25 percent reduction relative to the proposed project. The layout and project boundaries would remain the same as the proposed project. This alternative would lessen the severity of all of the proposed project's significant impacts.

Alternative 4: Phase 1 Only

Phase 1 would be developed, which consist of 1.1 million square feet of high-cube warehouse on 95 acres. Phase 2 would not be pursued, and the remaining 113 acres of the project site would remain undeveloped. This alternative would lessen the severity of all the proposed project's significant impacts to the greatest extent. The Phase 1 Only Alternative is the environmentally superior alternative.

Areas of Controversy and Potentially Controversial Issues

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on January 12, 2021. The NOP describing the original concept for the project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from January 12, 2021, through February 10, 2021. During the NOP review period, the following issues were raised in comments submitted to the City of American Canyon:

- Health effects on disadvantaged communities from diesel emissions
- Housing for project employees
- Climate change
- Impacts on nearby vernal pools

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of American Canyon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Organization of the Draft EIR

ES: Executive Summary. This section includes a summary of the proposed project and alternatives to be addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved, and overview of the Mitigation Monitoring and Reporting Program (MMRP), in addition to a table that summarizes the impacts, mitigation measures, and level of significance after mitigation, are also included in this section.

Chapter 1: Introduction. This chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.

Chapter 2: Project Description. This chapter includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals that are needed for the proposed project are also provided.

Chapter 3: Environmental Impact Analysis. This chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Section 3 are as follows:

- Section 3.1—Aesthetics, Light and Glare: Addresses the potential visual impacts of development intensification and the overall increase in illumination produced by the project.
- Section 3.2—Air Quality: Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. In addition, the section also evaluates project emissions of toxic air contaminants.
- Section 3.3—Biological Resources: Addresses the project's potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
- Section 3.4—Cultural and Tribal Cultural Resources: Addresses potential impacts on historical resources, unique archaeological resources, tribal cultural resources, and burial sites.
- Section 3.5—Geology, Soils, and Seismicity: Addresses the potential impacts the project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions as well as paleontological resources.
- Section 3.6—Greenhouse Gas Emissions and Energy: Addresses potential project impacts related to energy usage and project emissions of greenhouse gases.
- Section 3.7—Hazards and Hazardous Materials: Addresses the potential for the presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- Section 3.8—Hydrology and Water Quality: Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- Section 3.9—Land Use: Addresses the potential land use impacts associated with division of an established community and consistency with the City of American Canyon General Plan, the American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan.
Section 3.10—Noise: Addresses the potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- Section 3.11—Public Services: Addresses the potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.

- **Section 3.12—Transportation:** Addresses the impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
- Section 3.13—Utilities and Services Systems: Addresses the potential impacts upon service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.

Chapter 4: Cumulative Effects. Discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.

Chapter 5: Alternatives to the Proposed Project. Compares the impacts of the proposed project with four project alternatives: the No Project/No Development Alternative, the No Project/Existing General Plan Alternative, the Reduced Density Alternative, and the Phase 1 Only Alternative. An environmentally superior alternative is identified. In addition, alternatives initially considered but rejected from further consideration are discussed.

Chapter 6: Other CEQA Considerations. Provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects. In addition, the proposed project's energy demand is discussed.

C**hapter 7: Effects Found not to be Significant**. Contains analysis of the topical sections not addressed in Chapter 3.

Chapter 8: Persons and Organizations Consulted/List of Preparers. Contains a full list of persons and organizations that were consulted during the preparation of this Draft EIR. This section also contains a full list of the authors who assisted in the preparation of the Draft EIR, by name and affiliation.

Appendices. Includes all notices and other procedural documents pertinent to the Draft EIR as well as all technical material prepared to support the analysis.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

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

FISCAL IMPACT

Costs associated with preparing technical reports and staff review are borne by the applicant through a deposit trust account.

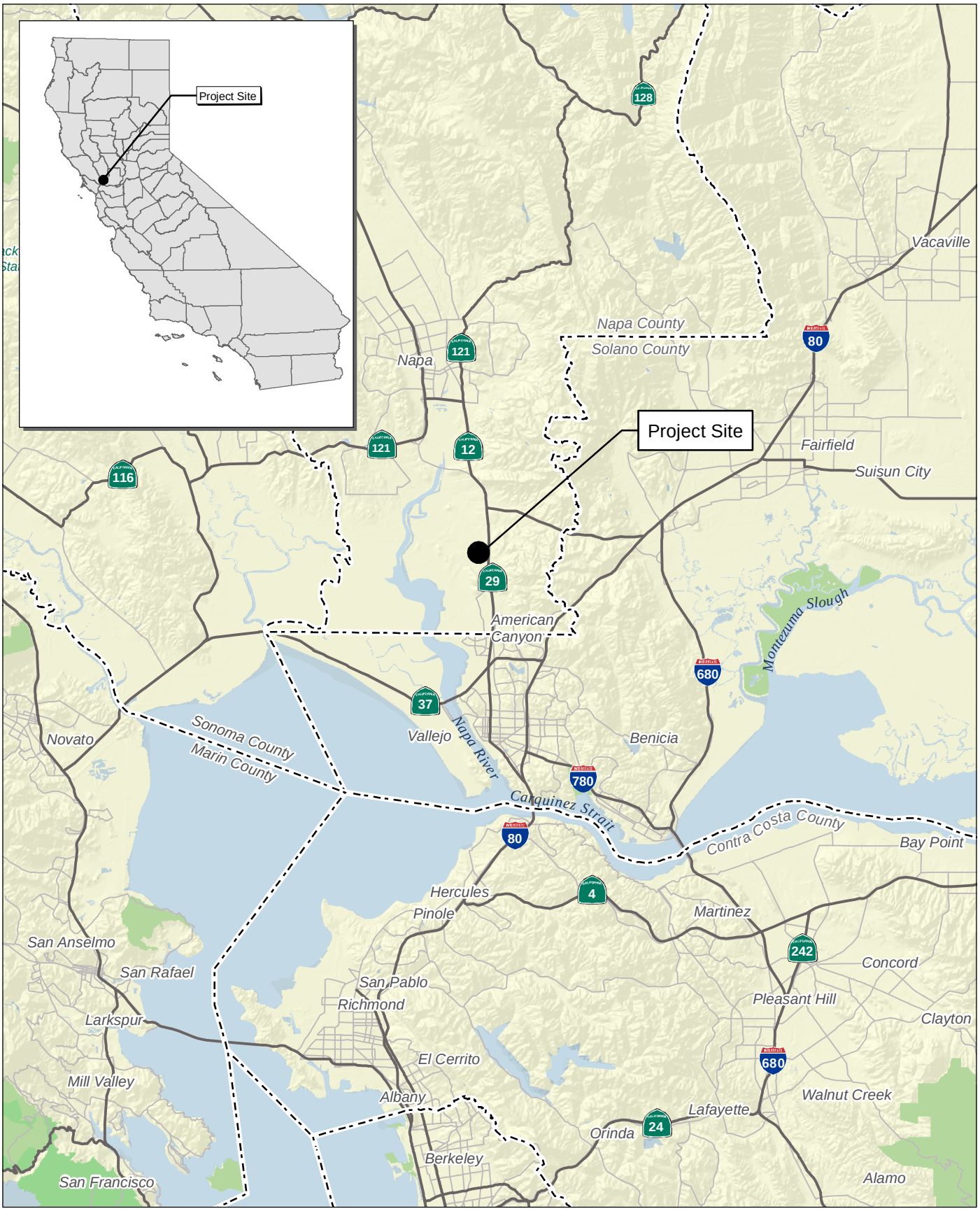
ENVIRONMENTAL REVIEW

Consistent with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was prepared for the proposed Giovannoni Logistics Center project to fully describe and

analyze environmental impacts.

ATTACHMENTS:

1. Regional Location Map
2. Project Location Map
3. Site Photographs
4. Phase 1 Site Plan
5. Warehouse Building Photosimulations
6. Summary of Mitigation Measures
7. Giovannoni Logistics Center Draft EIR



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

FIRSTCARBON SOLUTIONS™

5 2.5 0 5
Miles

Exhibit 2-1
Regional Location Map

54600001 • 01/2021 | 2-1_regional.mxd



Source: Google Earth Aerial Imagery, 10/2020. County of Napa.

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000
Feet

Exhibit 2-2
Local Vicinity Map

54600001 • 09/2021 | 2-2_local_vicinity.mxd



Photograph 1: View of Phase 1 (eastern) portion of project site.



Photograph 2: View of Phase 2 (western) portion of project site.



Photograph 3: View of the under construction segment of Devlin Road.

Source: FirstCarbon Solutions, 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 2-3
Site Photographs

PHASE 2

PHASE 1

Devlin Road

DEVLIN ROAD

Napa Branch Railroad Line

SOUTHERN PACIFIC RAILROAD

GREEN ISLAND ROAD

Green Island Road

3,057,581 S.F. ± SITE AREA =
70.19 ACRES
TOTAL BUILDING AREA = 1,069,904 S.F. =
34.99% COVERAGE

110,766 S.F. ± AREA OF STORM RETENTION
SHOWN
97,842 S.F. ± REQUIRED

SITE LEGEND:

- BUILDING AREA
- POTENTIAL OFFICE AREA
- ASPHALT AREA
- SITE CONCRETE
- STORM WATER RETENTION AREA
- LANDSCAPE AREA
- UNAVOIDABLE WETLAND IMPACTS
- ISOLATED WETLANDS
- WATERS OF THE U.S. WETLANDS
- DEVLIN RD / GREEN ISLAND RD WETLAND IMPACT
- EXISTING PROPERTY LINE
- NEW PARCEL LINE
- 50' WETLAND BUFFER
- NEW RAIL SPUR
- 9' X 10' OVERHEAD DOCK LEVEL DOOR
- 12' X 14' OVERHEAD GRADE LEVEL DOOR

0 50' 100' 200'

PLAN NORTH

Source: RMW Architecture Interiors, 11/11/2020.

FIRSTCARBON SOLUTIONS™

Exhibit 2-4
Preliminary Site Plan – Phase 1

54600001 • 02/2021 | 2-4_preliminary_site_plan_phase1.cdr



BUILDING B



BUILDING A



BUILDING B



BUILDING A

Source: RMW Architecture Interiors, 11/11/2020.

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Exhibit 2-5
Conceptual Renderings

Table ES-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics, Light, and Glare		
Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.	No mitigation is necessary.	Less than significant impact.
Impact AES-2: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.	No mitigation is necessary.	Less than significant impact.
Impact AES-3: The proposed project may create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	**MM AES-3:** 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 which demonstrates that all exterior light fixtures would be directed downward or employ full cut-off fixtures to minimize light spillage and avoid interference with aviation operations at the Napa County Airport. The approved plan shall be incorporated into the proposed project.	Less than significant impact.
Section 3.2—Air Quality		
Impact AIR-1: The proposed project would conflict with or obstruct implementation of the applicable air quality plan.	Implement Mitigation Measures MM AIR-2a, MM AIR-2b, MM AIR-2c, MM AIR-2d.	Significant unavoidable impact.
Impact AIR-2: The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.	**MM AIR-2a:** The following Best Management Practices (BMPs), as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the project and implemented during construction: • All active construction areas shall be watered at least two times per day. • All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard. • All visible mud or dirt tracked 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.	Significant unavoidable impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	• All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed 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 5 minutes (as required by the California Airborne Toxics Control Measure (ATCM) Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City and the construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. **MM AIR-2b:** Prior to the issuance of grading or building permits, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings during the proposed project's construction. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or volatile organic compounds (VOC) per liter of product. **MM AIR-2c:** Prior to issuing any certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings and electric landscaping equipment during the operation of the proposed project. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or volatile organic compounds (VOC) per liter of product. Landscaping equipment referred to in this requirement shall include lawnmowers, leaf blowers, and chainsaws.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	MM AIR-2d: Prior to issuing the certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of a truck fleet that meets or exceeds model year 2014 for all heavy-duty trucks during operation of the proposed project. If the project applicant does not own the truck fleet that would be used during operation of the proposed project, the project applicant shall provide the City with documentation from the truck fleet owner or operator demonstrating that trucks utilized for operation of the proposed project will meet or exceed model year 2014. If any change occurs where a new truck fleet is utilized during operation of the proposed project, the project applicant shall provide the City with documentation demonstrating that the new truck fleet meets or exceeds this requirement. To monitor and ensure that trucks that meet a model year of 2014 or newer are used for the proposed project, the fleet operator shall maintain records of all trucks and equipment associated with the proposed project's operation and make these records available to the City upon request. Alternatively, the City may require periodic reporting and provision of written records by operators and conduct regular inspections of the records to the maximum extent feasible and practicable.	
Impact AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	None Required.	Less than significant impact.
Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	None Required.	Less than significant impact.
Section 3.3—Biological Resources		
Impact BIO-1: The proposed project could 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 Wildlife or United States Fish and Wildlife Service.	**MM BIO-1a:** Pre-construction surveys for Swainson's hawk shall be conducted in the project site vicinity prior to initiation of project construction activities. These pre-construction surveys shall include investigation of all potential nesting trees within a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to commencement of project construction. Surveys shall follow California Department of Fish and Wildlife (CDFW) guidelines for	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	conducting surveys for Swainson's hawk that were developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk and reduce the potential for nest failures due to project activities and/or disturbances. If no nesting Swainson's hawk are found during the first non-optional survey period starting March 20, then project construction may commence. If during the third surveys (April 5–April 20) Swainson's hawk are found to be nesting in the project vicinity and construction has commenced, it shall be assumed the Swainson's hawk commenced nesting and thus that the Swainson's hawk are habituated to the ambient level of noise and disturbance emanating from the project site. If Swainson's hawk are found to be nesting within 1,000 feet of the project site, a non-disturbance buffer shall be established to keep all construction activities a minimum of 1,000 feet from the nest site. The CDFW shall be consulted regarding the adequacy of the buffer established by the qualified Raptor Biologist. At that time the necessity for acquiring a Fish and Game Section 2081 Incidental Take Permit (ITP) authorization would be determined. An ITP authorization shall be required if there is a valid concern the project activities would result in the "take" of an adult Swainson's hawk, eggs, or nestlings. No disturbance such as construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1b:** No more than 30 days prior to the first ground disturbance activity, pre-construction golden eagle nesting surveys shall be conducted in the project site vicinity. Pre-construction surveys shall include investigation of all potential nesting trees within a 0.5-mile radius around all project activities. If active golden eagle active nests are identified within any trees within a 0.5-mile radius of the project site, a qualified Raptor Biologist shall establish a protection buffer at a minimum of 1,000 feet that is adequate to ensure noise or activity from the proposed project would not cause nest disturbance or young or adult bird mortality. Buffer zones may vary in size as some golden eagles are more acclimated to disturbance than others. Size	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of buffer zone may be modified by the qualified Raptor Biologist considering the type of construction activity that may occur and the behavioral factors and extent that golden eagle may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young golden eagles have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1c:** Prior to ground disturbance, a pre-construction nesting survey shall be conducted for northern harrier if construction is scheduled during the nesting season (February 1 through September 1). To determine whether northern harrier is nesting on-site, a qualified Raptor Biologist(s) shall conduct walking transects through the project site grassland habitat searching for nests. An active northern harrier nest must be protected by implementing a minimum 500-foot radius buffer zone around the nest marked with orange construction fencing. If an active nest is located outside of the project site, the buffer shall be extended onto the project site and demarcated where it intersects the project site. Size of buffer zone could be modified considering the type of construction activity that may occur, physical barriers between the construction site and active nest, and the behavioral factors and extent that northern harrier may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the nesting cycle is otherwise determined to be complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1d:** Prior to any ground disturbance, pre-construction surveys for burrowing owl shall be conducted. The pre-construction surveys shall be conducted within 2 weeks prior to the onset of any ground-disturbing activities. Surveys shall be conducted by a qualified Biologist following California Department of Fish and Wildlife (CDFW) 2012 staff report survey methods and Biologist qualifications to establish the status of burrowing owl on the project site. If burrowing owl are found to occupy the project site during the nonbreeding season (September 1 to January 31), occupied burrows shall	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	be avoided by establishing a no-disturbance buffer zone a minimum of 100 feet around the burrow. Buffers may be adjusted to address site-specific conditions using the impact assessment approach described in the CDFW 2012 staff report. If a qualified Raptor Biologist determines the location of an occupied burrow/s may be impacted even with a 100-foot buffer, or the burrow(s) are in a location(s) on the project site where a buffer cannot be established without preventing the proposed project from moving forward, then a passive relocation effort may be instituted to relocate the individual(s) out of harm's way pursuant to a Burrowing Owl Exclusion Plan prepared in accordance with the CDFW 2012 staff report. If burrowing owl are found to be present during the breeding season (February 1 to August 31), the proposed project ground-disturbing activities shall follow the CDFW 2012 staff report recommended avoidance protocol whereby occupied burrows shall be avoided with a no-disturbance buffer.	
Impact BIO-2: The proposed project could 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 Wildlife or United States Fish and Wildlife Service.	**MM BIO-2:** To offset the loss of the 0.496 acre of seasonal wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of palustrine emergent wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.	Less than significant impact.
Impact BIO-3: The proposed project could 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.	**MM BIO-3a:** Prior to issuance of the Phase 1 grading permit, the project applicant shall apply for and obtain a Nationwide Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for discharge within 0.004 acre of wetlands/waters of the United States under Clean Water Act Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for impacts to 0.496 acre of wetlands/waters	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of the State. To offset the loss of 0.496 acre of permanent wetland impacts and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of wetlands (2:1 ratio), prior to or concurrent with the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3b**: Prior to issuance of the Phase 2 grading permit, the project applicant shall apply for and obtain an Individual Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for the placement of fill material within approximately 3.7 acres of wetlands/waters of the United States under Clean Water Act Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for the discharge of fill material within approximately 3.7 acres of waters of the State. To offset the loss of 3.7 acres of permanent wetland impacts and to ensure there is no-net loss of wetland area or permanent loss of functions and values, the applicant shall establish/create 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pools (1:1 ratio), at a minimum of 1 year prior to the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands and vernal pools shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3c:** Prior to issuance of the Phase 1 grading permit, a Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall address the loss of 0.496 acre of wetlands impact due to Phase 1 of the proposed project as well as the potential loss of approximately 3.7 acres of wetlands that as part	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of Phase 2. The Wetland Mitigation and Monitoring Plan shall include in irrevocable instrument (e.g., deed restriction or conservation easements) that shall restrict use of both the 0.992 acre of created wetlands for Phase 1 as well as approximately 3.7 acres of additional wetlands created for Phase 2. The Wetland Mitigation and Monitoring Plan shall also include a long-term endowment that would be fully funded by the proposed project to manage approximately 45-acre open space preserve and created wetlands in perpetuity. If additional wetland mitigation lands are required to compensate for wetland impacts associated with Phase 2, wetlands shall be established/created at a minimum 1:1 ratio (1 acre established/created for every acre permanently impacted) on appropriate mitigation land, approved by the RWQCB and United States Army Corps of Engineers (USACE), within the Phase 2 project site's Hydraulic Unit Code (HUC) 10 watershed. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3d:** Prior to issuance of the Phase 1 and Phase 2 grading permit, a Wetland Mitigation and Monitoring Plan shall be submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall be prepared in accordance with the Subpart J–Compensatory Mitigation for Losses of Aquatic Resources outlined in the California State Water Resources Control Board (State Water Board) Procedures, and in accordance with the State Water Board Implementation Guidance dated April 2020, and in accordance with the United States Army Corps of Engineers (USACE) Compensatory Mitigation Rule (33 Code of Federal Regulations Part 332) The basic objective of the Wetland Mitigation and Monitoring Plan is to ensure that project wetland impacts, and compensatory mitigation proposed to offset the wetland impacts, shall provide a no-net-loss of area of wetlands, and wetlands established/created shall be in-kind to the wetlands impacted. In summary, the Wetland Mitigation and Monitoring Plan shall at a minimum:	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	1. Preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of vernal pools within the 45-acre Wetland Preserve. 2. Establish within the Wetland Preserve approximately 0.992 acre of seasonal wetlands in advance of or concurrent with implementation of Phase 1 impacts to 0.496 acre of palustrine emergent wetlands at a 2:1 ratio. 3. Establish within the Wetland Preserve approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools in advance of implementation of future Phase 2, assuming Phase 2 is built out, to address the potential maximum losses of approximately 3.7 acres of wetlands that may occur. 4. Provide financial assurances to ensure a high level of confidence that the compensatory mitigation shall be successfully completed, in accordance with applicable performance standards. 5. Design ecological performance standards to assess whether the Wetland Mitigation and Monitoring Plan is achieving the overall objectives, so that it can be objectively evaluated to determine whether it is developing into the desired resource type (vernal pool, seasonal wetland e.g.), and attaining any other applicable metrics such as acres, number of native plant species, water saturation and/or ponding depth etc. 6. Monitor the site for a duration necessary to determine whether the Wetland Mitigation and Monitoring Plan is meeting the performance standards. Established palustrine emergent wetlands and vernal pools typically develop quickly on soils with clay restrictive horizon. The 45-acre Wetland Preserve does have a clay restrictive layer approximately 8–18 inches below the surface therefore a 5-year monitoring period would be sufficient to determine whether performance standards are met. This monitoring period may be extended if performance standards are not met due to how the wetlands were constructed or natural events such as severe droughts. 7. Protect the approximately 45-acre Wetland Preserve in perpetuity using a conservation easement, and provide an endowment sufficient to fund the Long-Term Management Plan. 8. An overall assessment of the condition of the wetlands that shall be permanently impacted by the proposed project shall be conducted using the California Rapid Assessment Method (CRAM) for depressional	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	wetlands, or a hybrid approach based on CRAM. Each similar wetland type that may be impacted shall be assessed to describe the floristic community and record the native and non-native dominant plants within the vernal pool and palustrine emergent wetlands. Physical structure such as topographic complexity and physical features that may provide habitat for aquatic species (e.g., boulders, woody debris etc.) shall be recorded and used to design the created/established wetlands. The purpose of this assessment is to ensure the design of the wetlands shall provide habitat that is similar to the wetlands being impacted to ensure the impacted wetlands are mitigated in-kind.	
Impact BIO-4: The proposed project could 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.	**MM BIO-4:** If construction occurs during the breeding season of migratory and resident birds (February 1 to August 31), a qualified Biologist shall conduct a pre-construction breeding bird survey in areas of suitable habitat within 15 days prior to the onset of construction activity. Nesting bird surveys shall cover the proposed project footprint and adjacent areas. If bird nests are found, appropriate buffer zones shall be established around all active nests to protect nesting adults and their young from direct or indirect impacts related to project construction disturbance. Size of buffer zones shall be determined per recommendations of the qualified Biologist based on-site conditions and species involved. At a minimum a 1,000-foot buffer shall be established for nesting Swainson's hawk and golden eagle; 500-foot buffer for nesting northern harriers; 250-foot buffer for nesting accipiters; and minimum 50-foot buffers shall be established for nesting passerines and all other non-raptor or passerine nesting birds. Buffer zones shall be maintained until it can be documented that either the nest has failed, or the young have fledged.	Less than significant impact.
Impact BIO-5: The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No mitigation is necessary.	Less than significant impact.
Section 3.4—Cultural and Tribal Cultural Resources		
Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	None required.	No impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	**MM CUL-2a:** No ground disturbance shall take place within 100 feet of informal archaeological resource 483A-001. The resource shall be preserved in place. **MM CUL-2b:** An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall be present on-site during all earth disturbing activities. 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 may include obsidian and chert flaked stone 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, hand stones, 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. The Archaeologist shall inspect the findings within 24 hours of discovery. If it is determined 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 Public Resources Code 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 Public Resources Code 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 proposed project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	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.	
Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries.	**MM CUL-3**: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2 Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:	Less than significant.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	• When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	
Impact CUL-4: The proposed project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	**MM CUL-4:** A Tribal Monitor representing the Yocha Dehe Wintun Nation shall be present during all project-related ground disturbance. Additionally, the Yocha Dehe Wintun Nation's Treatment Protocol (Protocol) shall be followed with respect to Tribal Cultural Resources (TCRs). The purpose of the protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, if any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground-disturbing activity. This Protocol also formalizes procedures for Tribal Monitoring during archaeological studies, grading, and ground-disturbing activities. 1. Cultural Affiliation: The Yocha Dehe Wintun Nation (Tribe) traditionally occupied lands in Yolo, Solano, Lake, Colusa, and Napa Counties. The Tribe has designated its Cultural Resources Committee (Committee) to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with projects on lands culturally affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol. 2. Inadvertent Discovery of Native American Human Remains**:** Whenever Native American human remains are found during the course of a project, the determination of Most Likely Descendant (MLD) under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission (NAHC) upon notification to the NAHC of the discovery of said remains at a project site. If the location of the site and the history and prehistory of the area is culturally affiliated with the	Less than significant.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents. Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe agrees with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely. 3. Treatment of Native American Remains: In the event that Native American human remains are found during development of a project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground-disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity. The Tribe shall complete its inspection and make its MLD recommendation within 48 hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future. The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	4. Non-Disclosure of Location of Reburials**:** Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, California Government Code Section 6250 *et seq*. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form acceptable to the CHRIS center. The Tribe may also suggest the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property. 5. Treatment of Cultural Resources**:** Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a project site shall be turned over to the Tribe for appropriate treatment, unless ordered by a court or agency of competent jurisdiction. The project proponent shall waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary, (for example, an Archaeologist retained by the project proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe. 6. Inadvertent Discoveries**:** If additional significant sites or sites not identified as significant in a project environmental review process, but later determined to be significant, are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project proponent, the Lead Agency, and the Tribe to determine whether additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact CUL-5: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.	Implement Mitigation Measures CUL-2a, CUL-2b, CUL-3 and CUL-4.	Less than significant impact.
Section 3.5—Geology, Soils and Seismicity		
Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.	**MM GEO-1a:** Prior to the issuance of building permits for each Phase 2 structure, the project applicant shall submit plans to the City of American Canyon for review and approval that demonstrate a minimum 50-foot setback between the West Napa Fault and each building. The approved plans shall be incorporated into the proposed project. **MM GEO-1b**: Prior to the issuance of building permits for each Phase 1 and 2 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 grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code (CBC) 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.	Less than significant impact.
Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.	**MM HYD-1a:** Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing, street sweeping, routine inspection, etc.) are effective and result in the reduction or elimination of pollutants in	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction.	
Impact GEO-3: The proposed project would not be located on an unstable geologic unit or soil.	No mitigation is necessary.	Less than significant impact.
Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.	Implement Mitigation Measure GEO-1b.	Less than significant impact.
Impact GEO-5: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**MM GEO-5**: 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. 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.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.6—Greenhouse Gas Emissions and Energy		
Impact GHG-1: The proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	**MM GHG-1a:** Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating project construction will include the following construction Best Management Practices (BMPs): • At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric. • At least 10 percent of building materials used for project construction shall be sourced from local suppliers. • At least 65 percent of construction and demolition waste materials shall be recycled or reused. • At least one contractor that has a business location in American Canyon shall be contracted for project construction. • All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered. • Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product. • Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The BAAQMD's	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	phone number shall also be identified and visible to ensure compliance with applicable regulations. **MM GHG-1b:** Prior to the issuance of any building permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating the proposed project is designed without the use of any natural gas -fueled appliances or natural gas plumbing. **MM GHG-1c:** Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed buildings are designed and will be built to, at a minimum, the Tier 2 advanced energy efficiency requirements of the Nonresidential Voluntary Measures of the California Green Building Standards Code, Division A5.2, Energy Efficiency, as outlined under Section A5.203.1.2.2. **MM GHG-1d:** Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed parking areas for passenger automobiles and trucks are designed and will be built to accommodate electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to accommodate a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2. Prior to the issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that each loading dock is each outfitted with at least one 240-volt outlet to accommodate truck and Transport Refrigeration Unit (TRU) charging and/or electrical power connection while trucks are loading and unloading goods. **MM GHG-1e:** Prior to the issuance of any building permit for the proposed project, the project applicant shall provide the City with documentation (e.g., site plans)	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	demonstrating to the City's satisfaction that the electricity demand will be supplied with 100 percent carbon-free electricity sources through the year 2045.	
Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation is necessary.	Less than significant impact.
Impact GHG-3: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No mitigation is necessary.	Less than significant impact.
Impact GHG-4: The proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	No mitigation is necessary.	Less than significant impact.
Section 3.7—Hazards and Hazardous Materials		
Impact HAZ-1: Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and 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.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-2: The proposed project 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.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-3: The proposed project may create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact HAZ-4: The proposed project would not impair emergency response or evacuation in the project vicinity.	No mitigation is necessary.	Less than significant impact.
Section 3.8—Hydrology and Water Quality		
Impact HYD-1: Construction activities and changes to drainage patterns associated with the proposed project may degrade surface water quality in downstream water bodies.	**MM HYD-1a**: Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing, street sweeping, routine inspection, etc.) 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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction. **MM HYD-1b**: Prior to the issuance of building permits, the project applicant shall submit a Stormwater Control Plan to the City of American Canyon for review and approval. The plan shall be developed using the California Stormwater Quality Association (CASQA) "New Development and Redevelopment Handbook" and include the applicable provisions of Section C.3 of the San Francisco Bay Regional Water Quality Control Board (RWQCB) Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	CAS612008 (or more recent permit). The Stormwater Control Plan shall identify pollution prevention measures and Best Management Practices (BMPs) to control stormwater pollution from operational activities and facilities and provide maintenance in perpetuity. The Stormwater Control Plan shall include Low Impact Development (LID) design concepts, as well as concepts that accomplish a "first flush" objective that remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City, identifying procedures to ensure stormwater quality control measures work properly during operations.	
Impact HYD-2: The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge.	No mitigation is necessary.	Less than significant impact.
Impact HYD-3: The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.	No mitigation is necessary.	Less than significant impact.
Section 3.9—Land Use		
Impact LU-1: The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.	No mitigation is necessary.	Less than significant impact.
Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.	No mitigation is necessary.	Less than significant impact.
Impact LU-3: The proposed project may conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.	Implement Mitigation Measure AES-3 and: **MM LU-3:** Prior to issuance of grading permits, the applicant shall retain a qualified Biologist to assess potential wildlife hazards to aviation. The assessment shall evaluate the characteristics of the emergent wetlands, drainages, other potential wildlife attractant features (i.e., ponded water) located within the open space area and identify management practices (e.g., storm drainage, vegetation, etc.) to prevent the creation of attractants for large flocks or birds or other wildlife species that may present safety	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	hazards to aviation activities. As part of the assessment, the applicant shall consult with Napa County Airport and Napa County Airport Land Use Commission (ALUC) representatives, as appropriate, regarding findings and recommendations. The applicant shall submit a report to the City of American Canyon prepared by a qualified Biologist that confirms the wildlife hazard assessment's findings and recommendations are incorporated into the design of the open space preserve.	
Section 3.10—Noise		
Impact NOI-1: The proposed project could generate a substantial temporary or permanent increase in ambient noise levels in noise-sensitive locations 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.	**MM NOI-1**: Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts: • The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers that are in good condition and appropriate for the equipment. • The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited. • The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists. • At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences. • The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site. • The construction contractor shall ensure that all on-site construction activities, including the operation of any tools or equipment used in construction, drilling, repair, alteration, grading, or demolition work, are limited to between the daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. No construction shall be permitted on Sundays and federal holidays.	Less than significant impact.
Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.		Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact NOI-3: The proposed project would not expose people residing or working in the project area to excessive noise levels 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.		Less than significant impact.
Section 3.11—Public Services		
Impact PS-1: The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Impact PS-2: The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Section 3.12—Transportation		
Impact TRANS-1: The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.	No mitigation is required.	Less than significant impact.
Impact TRANS-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No mitigation is necessary.	Less than significant impact.
Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	No mitigation is necessary.	Less than significant impact.
Impact TRANS-4: The proposed project would not result in inadequate emergency access.	No mitigation is necessary.	Less than significant impact.
Section 3.13—Utilities and Service Systems		
Impact USS-1: The proposed project would not require the City of American Canyon to obtain additional water supplies in order to serve the project and reasonably	No mitigation is required.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
foreseeable future development during normal, dry, and multiple dry years.		
Impact USS-2: The proposed project would not create a need for new or expanded wastewater collection or treatment facilities.	No mitigation is necessary.	Less than significant impact.
Impact USS-3: The proposed project would not result in a need for new or expanded off-site storm drainage facilities.	No mitigation is necessary.	Less than significant impact.
Impact USS-4: The proposed project's solid waste would not create a need for additional landfill capacity.	No mitigation is necessary.	Less than significant impact.

FIRSTCARBONSOLUTIONS™

DRAFT
Environmental Impact Report
Giovannoni Logistics Center Project
City of American Canyon, Napa County, California

State Clearinghouse Number 2021010104

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ACT	American Canyon Transit
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AERMOD	American Meteorological Society/EPA Regulatory Model
AFY	acre-feet/year
AIA	Airport Influence Area
AIC	Archaeological Information Center
AICUZ	Air Installation Compatibility Use Zone
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMS	American Meteorological Society
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQI	Air Quality Index
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BASMAA	Bay Area Stormwater Management Agencies Association

BAU	business-as-usual
BCDC	Bay Conservation and Development Commission
BCF	billion cubic feet
BCF/year	billion cubic feet per year
BERD	California Built Environment Resource Directory
BMP	Best Management Practice
BTU	British Thermal Unit
BVOC	biogenic volatile organic compound
C&D	construction and demolition waste
c/mve	collisions per million vehicles entering
C^2ES	Center for Climate and Energy Solution
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Health and Safety Administration
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CASQA	California Stormwater Quality Association
CBC	California Building Standards Code
CCA	community choice aggregations
CCAC	Climate and Clean Air Coalition
CCCC	California Climate Change Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CH4	methane
CHL	California Historical Landmarks

CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
COC	constituents of concern
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Code
CRA	Cultural Resources Assessment
CRAM	California Rapid Assessment Method
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DOE	United States Department of Energy
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
du	dwelling unit
du/acre	dwelling unit per acre
DWR	California Department of Water Resources
EECAP	Energy Efficiency Climate Action Plan
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EMF	electromagnetic field
EPA	United States Environmental Protection Agency
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map

FSM	Further Study Control Measure
GHG	greenhouse gas
GI	General Industrial
gpm	gallons per minute
GPS	Global Positioning System
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year
GWP	global warming potential
HAP	Hazardous Air Pollutant
HBG	Huffman-Broadway Group, Inc.
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
HI	hazard index
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HSWA	Hazardous and Solid Waste Act
HVAC	heating, ventilation, and air conditioning
HWCL	Hazardous Waste Control Law
IAQ	Indoor Air Quality
IPCC	United Nations Intergovernmental Panel on Climate Change
ISTEA	Intermodal Surface Transportation Efficiency Act
ITP	Incidental Take Permit
IW	Isolated Wetland
kW	kilowatts
LCFS	Low Carbon Fuel Standard
LDA	light-duty auto
L_{dn}	day/night average sound level
LDT1	light-duty truck 1
LDT2	light-duty truck 2
LED	light-emitting diode
LEEDTM	Leadership in Energy and Environmental Design
L_{eq}	equivalent sound level
LEV	low-emission vehicle
LID	Low Impact Development
LOS	Level of Service
LSE	load-serving entities

MBTA	Migratory Bird Treaty Act
MDV	medium-duty vehicle
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MTBE	methyl tertiary-butyl ether
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWh	megawatt-hour
MXD	mixed-use development
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NACC	Napa Airport Corporate Center
NAHC	Native American Heritage Commission
NapaSan	Napa Sanitation District
NCTPA	Napa County Transportation and Planning Agency
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NF_3	nitrogen trifluoride
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

NVWMA	Napa-Vallejo Waste Management Authority
NWIC	Northwest Information Center
NWPR	Navigable Waters Protection Rule
O_3	ozone
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONAC	Federal Office of Noise Abatement and Control
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PCE	Passenger Car Equivalent
pCi/L	picocuries per liter
PERP	Portable Equipment Registration Program
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
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
PMx	particulate matter
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
PRC	Public Resources Code
PPV	peak particle velocity
PRC	Public Resources Code
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
Recology	Integrated Resource Recovery Company
RecycleSmart	Central Contra Costa County Solid Waste Authority
REL	Reference Exposure Level
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act

SB	Senate Bill
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SIP	State Implementation Plan
SO_2	sulfur dioxide
South Coast AQMD	South Coast Air Quality Management District
SR	State Route
SS	Stationary Source
SSMM	start-up, shutdown, maintenance, and malfunction
State Water Board	California State Water Resources Control Board
STN	State Transportation Network
SWITRS	Statewide Integrated Traffic Records System
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids
TDV	Time Dependent Valuation
TEA-21	Transportation Equity Act for the 21st Century
Tg	teragram
therms/y	therms per year
TIA	Traffic Impact Analysis
TIF	Transportation Impact Fee
TIS	Traffic Impact Study
TISG	Transportation Impact Study Guide
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TNW	traditional navigable water
TOD	Transit Oriented Development
TRU	Transport Refrigeration Unit
UBC	Uniform Building Code
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture

USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
Valley Air District	San Joaquin Valley Air Pollution Control District
VDECS	Verified Diesel Emission Control Strategies
VINE	Valley Intercity Neighborhood Express
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WWTP	Wastewater Treatment Plant
ZEV	Zero Emission Vehicle
ZWF	zero water footprint

EXECUTIVE SUMMARY

Purpose

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Giovannoni Logistics Center Project (State Clearinghouse No. 2021010104). This document is prepared in conformance with CEQA (Public Resources Code [PRC] § 21000, *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et se*q.).

The purpose of this Draft EIR is to inform decision-makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed project. This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

Project Summary

Project Location

The 208-acre project site is located in the City of American Canyon, Napa County, California. The semi-rectangular project site is bounded by industrial development in the Green Island Business Park (west), the Napa Logistics Park and Devlin Road (north), the Napa Branch Line (east), and Green Island Road, a stone supply business, and a wine distribution warehouse (south).

Project Description

The proposed project consists of the development of up to 2.4 million square feet of high-cube warehouse on 163 acres of the project site. Phase 1 consists of approximately 1.1 million square feet on the eastern portion of the project site. Phase 2 consist of approximately 1.3 million square feet on the western portion of the project. Approximately 45 acres of the project site would be preserved as wetlands. The applicant would extend the Napa Valley Vine Trail along the project frontage with Devlin Road and Green Island Road. Section 2, Project Description, provides a complete description of the project.

Project Objectives and Underlying Purpose

The underlying purpose of the proposed project is to develop industrially zoned undeveloped land within the American Canyon city limits to its highest and best use.

The objectives of the proposed project are to:

1. Promote economic growth in American Canyon by attracting new industries.

2. Promote development that that generates net positive tax revenues for the City by generating more in new tax revenues than are consumed by City expenditures on services provided to the development.
3. Create new employment opportunities for residents of Napa County and the surrounding region.
4. Develop compatible land uses near the Napa County Airport in the interests of avoiding interference with aviation operations.
5. Improve American Canyon's jobs-housing ratio by adding new employment opportunities.
6. Continue the orderly development of the Devlin Road corridor with a well-designed project.
7. Further the goals and policies of the City of American Canyon General Plan by developing land contemplated to support urban development to its highest and best use.
8. Preserve the most biologically sensitive portions of the project site as open space.
9. Install circulation improvements along Green Island Road and Devlin Road that provide efficient ingress and egress to the proposed project while also ensuring these facilities operate at acceptable levels.
10. Promote public safety by incorporating security measures into the project design.
11. Mitigate impacts on the environment through implementation of feasible mitigation measures.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Consistency With Air Quality Management Plan:** The proposed project would result in exceedances of regional emissions thresholds and, therefore, be inconsistent with the Bay Area Air Quality Management District (BAAQMD) regional air quality planning assumptions. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reconcile this inconsistency. Therefore, the significance after mitigation is significant and unavoidable.
- **Cumulative Criteria Pollutant Emissions Impacts:** The proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable federal or State ambient air quality standard. Mitigation is proposed requiring the implementation of air emissions reduction measures, but it would not fully reduce this impact to a level of less than significant. Therefore, the significance after mitigation is significant and unavoidable.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives to the Proposed Project.

No Project/No Development Alternative

The proposed project would not be pursued, and the project site would remain undeveloped for the foreseeable future. This alternative would avoid all of the proposed project's significant impacts.

No Project/Existing General Plan Alternative

A 2.4 million square-foot food and beverage facility would be developed on the project site. The project boundaries would remain the same as the proposed project. This alternative would increase the severity of all of the proposed project's significant impacts.

Reduced Density Alternative

A 1.6-million-square-foot logistics center would be developed on the project site, which represents a 25 percent reduction relative to the proposed project. The layout and project boundaries would remain the same as the proposed project. This alternative would lessen the severity of all of the proposed project's significant impacts.

Phase 1 Only Alternative

Phase 1 would be developed, which consist of 1.1 million square feet of high-cube warehouse on 95 acres. Phase 2 would not be pursued, and the remaining 113 acres of the project site would remain undeveloped. This alternative would lessen the severity of all of the proposed project's significant impacts to the greatest extent. The Phase 1 Only Alternative is the environmentally superior alternative.

Areas of Controversy and Potentially Controversial Issues

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on January 12, 2021. The NOP describing the original concept for the project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from January 12, 2021, through February 10, 2021. During the NOP review period, the following issues were raised in comments submitted to the City of American Canyon:

- Health effects on disadvantaged communities from diesel emissions
- Housing for project employees
- Climate change
- Impacts on nearby vernal pools

- Impacts on special-status plant and wildlife species
- Traffic
- Aesthetics
- Noise

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of American Canyon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the City of American Canyon offices and the American Canyon Library. The address for each location is provided below:

American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours: Monday-Friday: 8:00 a.m. to 5:00 p.m.

American Canyon Library
300 Crawford Way
Hours: Monday-Saturday
10:00 a.m. to 5:30 p.m.

The Draft EIR is also posted on the City of American Canyon's website:
https://www.cityofamericancanyon.org

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Brent Cooper, AICP, Community Development Director
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Phone: 707.647.4335
Email: bcooper@cityofamericancanyon.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the City of American Canyon on the project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics, Light, and Glare		
Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.	No mitigation is necessary.	Less than significant impact.
Impact AES-2: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.	No mitigation is necessary.	Less than significant impact.
Impact AES-3: The proposed project may create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	**MM AES-3:** 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 which demonstrates that all exterior light fixtures would be directed downward or employ full cut-off fixtures to minimize light spillage and avoid interference with aviation operations at the Napa County Airport. The approved plan shall be incorporated into the proposed project.	Less than significant impact.
Section 3.2—Air Quality		
Impact AIR-1: The proposed project would conflict with or obstruct implementation of the applicable air quality plan.	Implement Mitigation Measures MM AIR-2a, MM AIR-2b, MM AIR-2c, MM AIR-2d.	Significant unavoidable impact.
Impact AIR-2: The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.	**MM AIR-2a:** The following Best Management Practices (BMPs), as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the project and implemented during construction: • All active construction areas shall be watered at least two times per day. • All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard. • All visible mud or dirt tracked 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.	Significant unavoidable impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	• All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed 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 5 minutes (as required by the California Airborne Toxics Control Measure (ATCM) Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City and the construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. **MM AIR-2b:** Prior to the issuance of grading or building permits, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings during the proposed project's construction. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or volatile organic compounds (VOC) per liter of product. **MM AIR-2c:** Prior to issuing any certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings and electric landscaping equipment during the operation of the proposed project. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or volatile organic compounds (VOC) per liter of product. Landscaping equipment referred to in this requirement shall include lawnmowers, leaf blowers, and chainsaws.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	MM AIR-2d: Prior to issuing the certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of a truck fleet that meets or exceeds model year 2014 for all heavy-duty trucks during operation of the proposed project. If the project applicant does not own the truck fleet that would be used during operation of the proposed project, the project applicant shall provide the City with documentation from the truck fleet owner or operator demonstrating that trucks utilized for operation of the proposed project will meet or exceed model year 2014. If any change occurs where a new truck fleet is utilized during operation of the proposed project, the project applicant shall provide the City with documentation demonstrating that the new truck fleet meets or exceeds this requirement. To monitor and ensure that trucks that meet a model year of 2014 or newer are used for the proposed project, the fleet operator shall maintain records of all trucks and equipment associated with the proposed project's operation and make these records available to the City upon request. Alternatively, the City may require periodic reporting and provision of written records by operators and conduct regular inspections of the records to the maximum extent feasible and practicable.	
Impact AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	None Required.	Less than significant impact.
Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	None Required.	Less than significant impact.
Section 3.3—Biological Resources		
Impact BIO-1: The proposed project could 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 Wildlife or United States Fish and Wildlife Service.	**MM BIO-1a:** Pre-construction surveys for Swainson's hawk shall be conducted in the project site vicinity prior to initiation of project construction activities. These pre-construction surveys shall include investigation of all potential nesting trees within a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to commencement of project construction. Surveys shall follow California Department of Fish and Wildlife (CDFW) guidelines for	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	conducting surveys for Swainson's hawk that were developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk and reduce the potential for nest failures due to project activities and/or disturbances. If no nesting Swainson's hawk are found during the first non-optional survey period starting March 20, then project construction may commence. If during the third surveys (April 5–April 20) Swainson's hawk are found to be nesting in the project vicinity and construction has commenced, it shall be assumed the Swainson's hawk commenced nesting and thus that the Swainson's hawk are habituated to the ambient level of noise and disturbance emanating from the project site. If Swainson's hawk are found to be nesting within 1,000 feet of the project site, a non-disturbance buffer shall be established to keep all construction activities a minimum of 1,000 feet from the nest site. The CDFW shall be consulted regarding the adequacy of the buffer established by the qualified Raptor Biologist. At that time the necessity for acquiring a Fish and Game Section 2081 Incidental Take Permit (ITP) authorization would be determined. An ITP authorization shall be required if there is a valid concern the project activities would result in the "take" of an adult Swainson's hawk, eggs, or nestlings. No disturbance such as construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1b:** No more than 30 days prior to the first ground disturbance activity, pre-construction golden eagle nesting surveys shall be conducted in the project site vicinity. Pre-construction surveys shall include investigation of all potential nesting trees within a 0.5-mile radius around all project activities. If active golden eagle active nests are identified within any trees within a 0.5-mile radius of the project site, a qualified Raptor Biologist shall establish a protection buffer at a minimum of 1,000 feet that is adequate to ensure noise or activity from the proposed project would not cause nest disturbance or young or adult bird mortality. Buffer zones may vary in size as some golden eagles are more acclimated to disturbance than others. Size	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of buffer zone may be modified by the qualified Raptor Biologist considering the type of construction activity that may occur and the behavioral factors and extent that golden eagle may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young golden eagles have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1c:** Prior to ground disturbance, a pre-construction nesting survey shall be conducted for northern harrier if construction is scheduled during the nesting season (February 1 through September 1). To determine whether northern harrier is nesting on-site, a qualified Raptor Biologist(s) shall conduct walking transects through the project site grassland habitat searching for nests. An active northern harrier nest must be protected by implementing a minimum 500-foot radius buffer zone around the nest marked with orange construction fencing. If an active nest is located outside of the project site, the buffer shall be extended onto the project site and demarcated where it intersects the project site. Size of buffer zone could be modified considering the type of construction activity that may occur, physical barriers between the construction site and active nest, and the behavioral factors and extent that northern harrier may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the nesting cycle is otherwise determined to be complete based on monitoring of the active nest by a qualified Biologist. **MM BIO-1d:** Prior to any ground disturbance, pre-construction surveys for burrowing owl shall be conducted. The pre-construction surveys shall be conducted within 2 weeks prior to the onset of any ground-disturbing activities. Surveys shall be conducted by a qualified Biologist following California Department of Fish and Wildlife (CDFW) 2012 staff report survey methods and Biologist qualifications to establish the status of burrowing owl on the project site. If burrowing owl are found to occupy the project site during the nonbreeding season (September 1 to January 31), occupied burrows shall	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	be avoided by establishing a no-disturbance buffer zone a minimum of 100 feet around the burrow. Buffers may be adjusted to address site-specific conditions using the impact assessment approach described in the CDFW 2012 staff report. If a qualified Raptor Biologist determines the location of an occupied burrow/s may be impacted even with a 100-foot buffer, or the burrow(s) are in a location(s) on the project site where a buffer cannot be established without preventing the proposed project from moving forward, then a passive relocation effort may be instituted to relocate the individual(s) out of harm's way pursuant to a Burrowing Owl Exclusion Plan prepared in accordance with the CDFW 2012 staff report. If burrowing owl are found to be present during the breeding season (February 1 to August 31), the proposed project ground-disturbing activities shall follow the CDFW 2012 staff report recommended avoidance protocol whereby occupied burrows shall be avoided with a no-disturbance buffer.	
Impact BIO-2: The proposed project could 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 Wildlife or United States Fish and Wildlife Service.	**MM BIO-2:** To offset the loss of the 0.496 acre of seasonal wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of palustrine emergent wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.	Less than significant impact.
Impact BIO-3: The proposed project could 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.	**MM BIO-3a:** Prior to issuance of the Phase 1 grading permit, the project applicant shall apply for and obtain a Nationwide Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for discharge within 0.004 acre of wetlands/waters of the United States under Clean Water Act Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for impacts to 0.496 acre of wetlands/waters	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of the State. To offset the loss of 0.496 acre of permanent wetland impacts and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of wetlands (2:1 ratio), prior to or concurrent with the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3b**: Prior to issuance of the Phase 2 grading permit, the project applicant shall apply for and obtain an Individual Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for the placement of fill material within approximately 3.7 acres of wetlands/waters of the United States under Clean Water Act Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for the discharge of fill material within approximately 3.7 acres of waters of the State. To offset the loss of 3.7 acres of permanent wetland impacts and to ensure there is no-net loss of wetland area or permanent loss of functions and values, the applicant shall establish/create 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pools (1:1 ratio), at a minimum of 1 year prior to the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands and vernal pools shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3c:** Prior to issuance of the Phase 1 grading permit, a Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall address the loss of 0.496 acre of wetlands impact due to Phase 1 of the proposed project as well as the potential loss of approximately 3.7 acres of wetlands that as part	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	of Phase 2. The Wetland Mitigation and Monitoring Plan shall include in irrevocable instrument (e.g., deed restriction or conservation easements) that shall restrict use of both the 0.992 acre of created wetlands for Phase 1 as well as approximately 3.7 acres of additional wetlands created for Phase 2. The Wetland Mitigation and Monitoring Plan shall also include a long-term endowment that would be fully funded by the proposed project to manage approximately 45-acre open space preserve and created wetlands in perpetuity. If additional wetland mitigation lands are required to compensate for wetland impacts associated with Phase 2, wetlands shall be established/created at a minimum 1:1 ratio (1 acre established/created for every acre permanently impacted) on appropriate mitigation land, approved by the RWQCB and United States Army Corps of Engineers (USACE), within the Phase 2 project site's Hydraulic Unit Code (HUC) 10 watershed. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s). **MM BIO-3d:** Prior to issuance of the Phase 1 and Phase 2 grading permit, a Wetland Mitigation and Monitoring Plan shall be submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall be prepared in accordance with the Subpart J–Compensatory Mitigation for Losses of Aquatic Resources outlined in the California State Water Resources Control Board (State Water Board) Procedures, and in accordance with the State Water Board Implementation Guidance dated April 2020, and in accordance with the United States Army Corps of Engineers (USACE) Compensatory Mitigation Rule (33 Code of Federal Regulations Part 332) The basic objective of the Wetland Mitigation and Monitoring Plan is to ensure that project wetland impacts, and compensatory mitigation proposed to offset the wetland impacts, shall provide a no-net-loss of area of wetlands, and wetlands established/created shall be in-kind to the wetlands impacted. In summary, the Wetland Mitigation and Monitoring Plan shall at a minimum:	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	1. Preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of vernal pools within the 45-acre Wetland Preserve. 2. Establish within the Wetland Preserve approximately 0.992 acre of seasonal wetlands in advance of or concurrent with implementation of Phase 1 impacts to 0.496 acre of palustrine emergent wetlands at a 2:1 ratio. 3. Establish within the Wetland Preserve approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools in advance of implementation of future Phase 2, assuming Phase 2 is built out, to address the potential maximum losses of approximately 3.7 acres of wetlands that may occur. 4. Provide financial assurances to ensure a high level of confidence that the compensatory mitigation shall be successfully completed, in accordance with applicable performance standards. 5. Design ecological performance standards to assess whether the Wetland Mitigation and Monitoring Plan is achieving the overall objectives, so that it can be objectively evaluated to determine whether it is developing into the desired resource type (vernal pool, seasonal wetland e.g.), and attaining any other applicable metrics such as acres, number of native plant species, water saturation and/or ponding depth etc. 6. Monitor the site for a duration necessary to determine whether the Wetland Mitigation and Monitoring Plan is meeting the performance standards. Established palustrine emergent wetlands and vernal pools typically develop quickly on soils with clay restrictive horizon. The 45-acre Wetland Preserve does have a clay restrictive layer approximately 8–18 inches below the surface therefore a 5-year monitoring period would be sufficient to determine whether performance standards are met. This monitoring period may be extended if performance standards are not met due to how the wetlands were constructed or natural events such as severe droughts. 7. Protect the approximately 45-acre Wetland Preserve in perpetuity using a conservation easement, and provide an endowment sufficient to fund the Long-Term Management Plan. 8. An overall assessment of the condition of the wetlands that shall be permanently impacted by the proposed project shall be conducted using the California Rapid Assessment Method (CRAM) for depressional	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	wetlands, or a hybrid approach based on CRAM. Each similar wetland type that may be impacted shall be assessed to describe the floristic community and record the native and non-native dominant plants within the vernal pool and palustrine emergent wetlands. Physical structure such as topographic complexity and physical features that may provide habitat for aquatic species (e.g., boulders, woody debris etc.) shall be recorded and used to design the created/established wetlands. The purpose of this assessment is to ensure the design of the wetlands shall provide habitat that is similar to the wetlands being impacted to ensure the impacted wetlands are mitigated in-kind.	
Impact BIO-4: The proposed project could 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.	**MM BIO-4:** If construction occurs during the breeding season of migratory and resident birds (February 1 to August 31), a qualified Biologist shall conduct a pre-construction breeding bird survey in areas of suitable habitat within 15 days prior to the onset of construction activity. Nesting bird surveys shall cover the proposed project footprint and adjacent areas. If bird nests are found, appropriate buffer zones shall be established around all active nests to protect nesting adults and their young from direct or indirect impacts related to project construction disturbance. Size of buffer zones shall be determined per recommendations of the qualified Biologist based on-site conditions and species involved. At a minimum a 1,000-foot buffer shall be established for nesting Swainson's hawk and golden eagle; 500-foot buffer for nesting northern harriers; 250-foot buffer for nesting accipiters; and minimum 50-foot buffers shall be established for nesting passerines and all other non-raptor or passerine nesting birds. Buffer zones shall be maintained until it can be documented that either the nest has failed, or the young have fledged.	Less than significant impact.
Impact BIO-5: The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No mitigation is necessary.	Less than significant impact.
Section 3.4—Cultural and Tribal Cultural Resources		
Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	None required.	No impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	**MM CUL-2a:** No ground disturbance shall take place within 100 feet of informal archaeological resource 483A-001. The resource shall be preserved in place. **MM CUL-2b:** An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall be present on-site during all earth disturbing activities. 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 may include obsidian and chert flaked stone 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, hand stones, 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. The Archaeologist shall inspect the findings within 24 hours of discovery. If it is determined 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 Public Resources Code 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 Public Resources Code 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 proposed project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	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.	
Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries.	**MM CUL-3**: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2 Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:	Less than significant.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	• When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	
Impact CUL-4: The proposed project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	**MM CUL-4:** A Tribal Monitor representing the Yocha Dehe Wintun Nation shall be present during all project-related ground disturbance. Additionally, the Yocha Dehe Wintun Nation's Treatment Protocol (Protocol) shall be followed with respect to Tribal Cultural Resources (TCRs). The purpose of the protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, if any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground-disturbing activity. This Protocol also formalizes procedures for Tribal Monitoring during archaeological studies, grading, and ground-disturbing activities. 1. Cultural Affiliation: The Yocha Dehe Wintun Nation (Tribe) traditionally occupied lands in Yolo, Solano, Lake, Colusa, and Napa Counties. The Tribe has designated its Cultural Resources Committee (Committee) to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with projects on lands culturally affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol. 2. Inadvertent Discovery of Native American Human Remains**:** Whenever Native American human remains are found during the course of a project, the determination of Most Likely Descendant (MLD) under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission (NAHC) upon notification to the NAHC of the discovery of said remains at a project site. If the location of the site and the history and prehistory of the area is culturally affiliated with the	Less than significant.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents. Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe agrees with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely. 3. Treatment of Native American Remains: In the event that Native American human remains are found during development of a project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground-disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity. The Tribe shall complete its inspection and make its MLD recommendation within 48 hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future. The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	4. Non-Disclosure of Location of Reburials**:** Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, California Government Code Section 6250 *et seq*. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form acceptable to the CHRIS center. The Tribe may also suggest the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property. 5. Treatment of Cultural Resources**:** Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a project site shall be turned over to the Tribe for appropriate treatment, unless ordered by a court or agency of competent jurisdiction. The project proponent shall waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary, (for example, an Archaeologist retained by the project proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe. 6. Inadvertent Discoveries**:** If additional significant sites or sites not identified as significant in a project environmental review process, but later determined to be significant, are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project proponent, the Lead Agency, and the Tribe to determine whether additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact CUL-5: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.	Implement Mitigation Measures CUL-2a, CUL-2b, CUL-3 and CUL-4.	Less than significant impact.
Section 3.5—Geology, Soils and Seismicity		
Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.	**MM GEO-1a:** Prior to the issuance of building permits for each Phase 2 structure, the project applicant shall submit plans to the City of American Canyon for review and approval that demonstrate a minimum 50-foot setback between the West Napa Fault and each building. The approved plans shall be incorporated into the proposed project. **MM GEO-1b**: Prior to the issuance of building permits for each Phase 1 and 2 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 grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code (CBC) 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.	Less than significant impact.
Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.	**MM HYD-1a:** Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing, street sweeping, routine inspection, etc.) are effective and result in the reduction or elimination of pollutants in	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction.	
Impact GEO-3: The proposed project would not be located on an unstable geologic unit or soil.	No mitigation is necessary.	Less than significant impact.
Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.	Implement Mitigation Measure GEO-1b.	Less than significant impact.
Impact GEO-5: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**MM GEO-5**: 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. 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.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.6—Greenhouse Gas Emissions and Energy		
Impact GHG-1: The proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	**MM GHG-1a:** Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating project construction will include the following construction Best Management Practices (BMPs): • At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric. • At least 10 percent of building materials used for project construction shall be sourced from local suppliers. • At least 65 percent of construction and demolition waste materials shall be recycled or reused. • At least one contractor that has a business location in American Canyon shall be contracted for project construction. • All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered. • Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product. • Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The BAAQMD's	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	phone number shall also be identified and visible to ensure compliance with applicable regulations. **MM GHG-1b:** Prior to the issuance of any building permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating the proposed project is designed without the use of any natural gas -fueled appliances or natural gas plumbing. **MM GHG-1c:** Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed buildings are designed and will be built to, at a minimum, the Tier 2 advanced energy efficiency requirements of the Nonresidential Voluntary Measures of the California Green Building Standards Code, Division A5.2, Energy Efficiency, as outlined under Section A5.203.1.2.2. **MM GHG-1d:** Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed parking areas for passenger automobiles and trucks are designed and will be built to accommodate electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to accommodate a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2. Prior to the issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that each loading dock is each outfitted with at least one 240-volt outlet to accommodate truck and Transport Refrigeration Unit (TRU) charging and/or electrical power connection while trucks are loading and unloading goods. **MM GHG-1e:** Prior to the issuance of any building permit for the proposed project, the project applicant shall provide the City with documentation (e.g., site plans)	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	demonstrating to the City's satisfaction that the electricity demand will be supplied with 100 percent carbon-free electricity sources through the year 2045.	
Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation is necessary.	Less than significant impact.
Impact GHG-3: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No mitigation is necessary.	Less than significant impact.
Impact GHG-4: The proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	No mitigation is necessary.	Less than significant impact.
Section 3.7—Hazards and Hazardous Materials		
Impact HAZ-1: Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and 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.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-2: The proposed project 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.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-3: The proposed project may create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact HAZ-4: The proposed project would not impair emergency response or evacuation in the project vicinity.	No mitigation is necessary.	Less than significant impact.
Section 3.8—Hydrology and Water Quality		
Impact HYD-1: Construction activities and changes to drainage patterns associated with the proposed project may degrade surface water quality in downstream water bodies.	**MM HYD-1a**: Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing, street sweeping, routine inspection, etc.) 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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction. **MM HYD-1b**: Prior to the issuance of building permits, the project applicant shall submit a Stormwater Control Plan to the City of American Canyon for review and approval. The plan shall be developed using the California Stormwater Quality Association (CASQA) "New Development and Redevelopment Handbook" and include the applicable provisions of Section C.3 of the San Francisco Bay Regional Water Quality Control Board (RWQCB) Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	CAS612008 (or more recent permit). The Stormwater Control Plan shall identify pollution prevention measures and Best Management Practices (BMPs) to control stormwater pollution from operational activities and facilities and provide maintenance in perpetuity. The Stormwater Control Plan shall include Low Impact Development (LID) design concepts, as well as concepts that accomplish a "first flush" objective that remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City, identifying procedures to ensure stormwater quality control measures work properly during operations.	
Impact HYD-2: The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge.	No mitigation is necessary.	Less than significant impact.
Impact HYD-3: The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.	No mitigation is necessary.	Less than significant impact.
Section 3.9—Land Use		
Impact LU-1: The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.	No mitigation is necessary.	Less than significant impact.
Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.	No mitigation is necessary.	Less than significant impact.
Impact LU-3: The proposed project may conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.	Implement Mitigation Measure AES-3 and: **MM LU-3:** Prior to issuance of grading permits, the applicant shall retain a qualified Biologist to assess potential wildlife hazards to aviation. The assessment shall evaluate the characteristics of the emergent wetlands, drainages, other potential wildlife attractant features (i.e., ponded water) located within the open space area and identify management practices (e.g., storm drainage, vegetation, etc.) to prevent the creation of attractants for large flocks or birds or other wildlife species that may present safety	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	hazards to aviation activities. As part of the assessment, the applicant shall consult with Napa County Airport and Napa County Airport Land Use Commission (ALUC) representatives, as appropriate, regarding findings and recommendations. The applicant shall submit a report to the City of American Canyon prepared by a qualified Biologist that confirms the wildlife hazard assessment's findings and recommendations are incorporated into the design of the open space preserve.	
Section 3.10—Noise		
Impact NOI-1: The proposed project could generate a substantial temporary or permanent increase in ambient noise levels in noise-sensitive locations 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.	**MM NOI-1**: Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts: • The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers that are in good condition and appropriate for the equipment. • The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited. • The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists. • At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences. • The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site. • The construction contractor shall ensure that all on-site construction activities, including the operation of any tools or equipment used in construction, drilling, repair, alteration, grading, or demolition work, are limited to between the daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. No construction shall be permitted on Sundays and federal holidays.	Less than significant impact.
Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.		Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact NOI-3: The proposed project would not expose people residing or working in the project area to excessive noise levels 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.		Less than significant impact.
Section 3.11—Public Services		
Impact PS-1: The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Impact PS-2: The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Section 3.12—Transportation		
Impact TRANS-1: The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.	No mitigation is required.	Less than significant impact.
Impact TRANS-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No mitigation is necessary.	Less than significant impact.
Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	No mitigation is necessary.	Less than significant impact.
Impact TRANS-4: The proposed project would not result in inadequate emergency access.	No mitigation is necessary.	Less than significant impact.
Section 3.13—Utilities and Service Systems		
Impact USS-1: The proposed project would not require the City of American Canyon to obtain additional water supplies in order to serve the project and reasonably	No mitigation is required.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
foreseeable future development during normal, dry, and multiple dry years.		
Impact USS-2: The proposed project would not create a need for new or expanded wastewater collection or treatment facilities.	No mitigation is necessary.	Less than significant impact.
Impact USS-3: The proposed project would not result in a need for new or expanded off-site storm drainage facilities.	No mitigation is necessary.	Less than significant impact.
Impact USS-4: The proposed project's solid waste would not create a need for additional landfill capacity.	No mitigation is necessary.	Less than significant impact.

CHAPTER 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the proposed Giovannoni Logistics Center Project (proposed project) (State Clearinghouse No. 2021010104). This document is prepared in conformance with CEQA (California Public Resources Code [PRC], § 21000, *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq*.). This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project.

1.1.1 - Overview

The proposed project consists of the development of up to 2.4 million square feet of high-cube warehouse on 208-acre project site. Phase 1 consists of approximately 1.1 million square feet on the eastern portion of the project site. Phase 2 consist of approximately 1.3 million square feet on the western portion of the project. Approximately 45 acres of the project site would be preserved as wetlands. The applicant would also extend the Napa Valley Vine Trail along the project frontage with Devlin Road and Green Island Road. Section 2, Project Description, provides a complete description of the project.

1.1.2 - Purpose and Authority

This Draft EIR for the proposed Giovannoni Logistics Center Project is a combination of a project EIR and a program EIR. The Draft EIR provides a project-level analysis of the environmental effects of Phase 1 and programmatic analysis for Phase 2 of the Project.

The project-level analysis for Phase 1, consistent with CEQA Guidelines Section 15161, provides sufficient detail to allow for approvals of all needed approvals and permitting for, as well as construction of, Phase 1 without any need for additional environmental review, provided that future project changes or changed circumstances do not trigger the need for some sort of subsequent environmental review pursuant to CEQA Guidelines Sections 15162 through 15164 (subsequent EIR, supplement to an EIR, or addendum to an EIR).

The programmatic level of analysis for Phase 2 has been prepared pursuant to CEQA Guidelines Section 15168. Under Section 15168(c), "[l]ater activities in the program must be examined in the light of [a] program EIR to determine whether an additional environmental document must be prepared." Two general outcomes are possible: the later activity may be found to be "within the scope of the project covered by the program EIR," in which case "no new environmental document would be required;" or such a finding cannot be made and a new project-specific Mitigated Negative Declaration or EIR would be required, depending on the severity of the effects of the later activity.

Section 15168(c)(4) directs that "[w]here the later activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and

the activity to determine whether the environmental effects of the operation were within the scope of the program EIR."

Section 15168(c)(2) provides that "[i]f the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR."

For any later activity covered in whole or in part in the program EIR, "[a]n agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into later activities in the program" (CEQA Guidelines Section 15168(c)(2)).

This document addresses the potentially significant adverse environmental impacts (both project-level and programmatic) that may be associated with the planning, construction, or operation of the proposed project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Executive Summary
- Introduction
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts (Addressed in Chapter 6, Other CEQA Considerations)Areas of Known Controversy

1.1.3 - Lead Agency Determination

The City of American Canyon is designated as the lead agency for the project. CEQA Guidelines Section 15367 defines the lead agency as ". . . the public agency, which has the principal responsibility for carrying out or approving a project." Once the City certifies the Final EIR for the proposed project after soliciting and responding to public and agency comments on this Draft EIR, other public agencies acting as responsible agencies may use the Final EIR in their own decision-making or permit processes.

This Draft EIR was prepared by FirstCarbon Solutions (FCS), an environmental consultant. Prior to public review, it was extensively reviewed and evaluated by the City of American Canyon. This Draft EIR reflects the independent judgment and analysis of the City of American Canyon as required by

CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Chapter 8, Persons and Organizations/List of Preparers, of this Draft EIR.

1.2 - Scope of the Draft EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The City of American Canyon issued a Notice of Preparation (NOP) for the proposed project on January 12, 2021, which circulated between January 12, 2021, and February 10, 2021, for the statutory 30-day public review period. The scope of this Draft EIR includes the potential environmental impacts identified in the NOP and issues raised by agencies and the public in response to the NOP. The NOP is contained in Appendix A of this Draft EIR.

Seven comment letters were received in response to the NOP. They are listed in Table 1-1 and provided in Appendix A of this Draft EIR.

Table 1-1: NOP Comment Letter Summary

Status	Affiliation	Signatory	Date
Public Agencies	Native American Heritage Commission	Nancy Gonzalez-Lopez	January 13, 2021
	California Air Resources Board	Heather Arias, Chief, Transportation and Toxics Division	February 8, 2021
	California Department of Fish and Wildlife	Greg Erickson, Regional Manager, Bay Delta Region	February 8, 2021
	Napa County Planning, Building and Environmental Services Department	John McDowell	February 10, 2021
Private Parties	Ironworkers Local 378	Jason Lindsey, Business Representative	February 4, 2021
	Ironworkers Local 378	Jason Gallia, President/Business Agent	February 8, 2021
	Center for Biological Diversity	Ross Middlemiss, Staff Attorney; Mary Rassenfoss, Legal Fellow	February 9, 2021
Source: City of American Canyon 2021.			

1.2.1 - Scoping Meeting

Pursuant to CEQA Guidelines Section 15082(c)(1), the City of American Canyon held a virtual public scoping meeting for the proposed project on Tuesday, February 2, 2021. The meeting was recorded and is posted on the City of American Canyon's website: www.cityofamericancanyon.org.

1.2.2 - Environmental Issues Determined not to be Significant

The NOP identified topical areas that were determined not to be significant. An explanation, in compliance with CEQA Guidelines Section 15128, of the reasons why each area is determined not to

be significant is also provided in Chapter 7, Effects Found not to be Significant. These topical areas are as follows:

- Agriculture and Forest Resources
- Mineral Resources
- Population and Housing
- Recreation
- Wildfire

In addition, certain subjects with various topical areas were determined not to be significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are not analyzed:

- State Scenic Highways
- Septic or Alternative Wastewater Disposal Systems
- Exposure of Schools to Hazardous Materials
- Private Airstrips
- Emergency Response or Evacuation Plan
- Wildland Fire
- Levee or Dam Failure
- Seiches, Tsunamis, or Mudflows
- Division of an Established Community
- Schools
- Parks
- Other Public Facilities

An explanation, in compliance with CEQA Guidelines Section 15128, of the reasons why each issue is determined not to be significant is provided in Chapter 7, Effects Found Not to be Significant.

1.2.3 - Potentially Significant Environmental Issues

The NOP found that the following topical areas may contain potentially significant environmental issues that will require further analysis in the Draft EIR. These sections are as follows:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utility Systems

1.3 - Organization of the Draft EIR

This Draft EIR is organized into the following main sections:

- **ES: Executive Summary.** This section includes a summary of the proposed project and alternatives to be addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved, and overview of the Mitigation Monitoring and Reporting Program (MMRP), in addition to a table that summarizes the impacts, mitigation measures, and level of significance after mitigation, are also included in this section.
- **Chapter 1: Introduction.** This chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Chapter 2: Project Description.** This chapter includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals that are needed for the proposed project are also provided.
- **Chapter 3: Environmental Impact Analysis.** This chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Section 3 are as follows:
  - **Section 3.1—Aesthetics, Light and Glare:** Addresses the potential visual impacts of development intensification and the overall increase in illumination produced by the project.
  - **Section 3.2—Air Quality:** Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. In addition, the section also evaluates project emissions of toxic air contaminants.
  - **Section 3.3—Biological Resources:** Addresses the project's potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
  - **Section 3.4—Cultural and Tribal Cultural Resources:** Addresses potential impacts on historical resources, unique archaeological resources, tribal cultural resources, and burial sites.
  - **Section 3.5—Geology, Soils, and Seismicity:** Addresses the potential impacts the project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions as well as paleontological resources.
  - **Section 3.6—Greenhouse Gas Emissions and Energy:** Addresses potential project impacts related to energy usage and project emissions of greenhouse gases.
  - **Section 3.7—Hazards and Hazardous Materials:** Addresses the potential for the presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
  - **Section 3.8—Hydrology and Water Quality:** Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
  - **Section 3.9—Land Use:** Addresses the potential land use impacts associated with division of an established community and consistency with the City of American Canyon General Plan, the American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan.

- **Section 3.10—Noise:** Addresses the potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- **Section 3.11—Public Services:** Addresses the potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.
- **Section 3.12—Transportation:** Addresses the impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
- **Section 3.13—Utilities and Services Systems:** Addresses the potential impacts upon service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.

- **Chapter 4: Cumulative Effects.** Discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.
- **Chapter 5: Alternatives to the Proposed Project.** Compares the impacts of the proposed project with four project alternatives: the No Project/No Development Alternative, the No Project/Existing General Plan Alternative, the Reduced Density Alternative, and the Phase 1 Only Alternative. An environmentally superior alternative is identified. In addition, alternatives initially considered but rejected from further consideration are discussed.
- **Chapter 6: Other CEQA Considerations. Provides** a summary of significant environmental impacts, including unavoidable and growth-inducing impacts. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects. In addition, the proposed project's energy demand is discussed.
- **Chapter 7: Effects Found not to be Significant.** Contains analysis of the topical sections not addressed in Chapter 3.
- **Chapter 8: Persons and Organizations Consulted/List of Preparers.** Contains a full list of persons and organizations that were consulted during the preparation of this Draft EIR. This section also contains a full list of the authors who assisted in the preparation of the Draft EIR, by name and affiliation.
- **Appendices.** Includes all notices and other procedural documents pertinent to the Draft EIR as well as all technical material prepared to support the analysis.

1.4 - Documents Used In Preparation of the Draft EIR

This Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of American Canyon General Plan
- American Canyon Zoning Ordinance
- Napa County Airport Land Use Compatibility Plan
- City of American Canyon Urban Water Management Plan

In accordance with CEQA Guidelines Section 15150(b), the referenced documents and other sources used in the preparation of the Draft EIR are available for review at American Canyon City Hall at the address shown in Section 1.6 or online at www.cityofamericancanyon.org.

1.5 - Documents Prepared for the Project

The following technical studies and analyses were prepared for the proposed project:

- Air Quality/Greenhouse Gas Emissions Analysis, prepared by FirstCarbon Solutions (The analysis is wholly contained in Section 3.2, Air Quality/Greenhouse Gas Emissions and supporting information is provided in Appendix B.1)
- Health Risk Assessment, prepared by FirstCarbon Solutions (Appendix B.2)
- Biological Resources Study, prepared by Huffman Broadway Group (Appendix C)
- Section 106 Cultural Resources Assessment, prepared by FirstCarbon Solutions (Appendix D)
- Geotechnical Engineering Report, prepared by Wallace Kuhl & Associates (Appendix E.1)
- Geological Fault Investigation, prepared by Cornerstone Earth Group (Appendix E.2)
- Preliminary Hydrologic and Hydraulic Modeling Memo, prepared by Balance Hydrologics (Appendix F)
- Noise Analysis, prepared by FirstCarbon Solutions (The analysis is wholly contained in Section 3.9, Noise and supporting information is provided in Appendix G)
- Traffic Impact Study, prepared by W-Trans (Appendix H)
- Water Supply Assessment, prepared by Balance Hydrologics (Appendix I.1)
- Preliminary Sanitary Sewer Sizing Calculations, prepared by CBG (Appendix I.2)

1.6 - Review of the Draft EIR

The City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the Draft EIR public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the locations listed below and online at www.cityofamericancanyon.org.

American Canyon City Hall
Community Development Department
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours:
Monday-Friday: 8:00 a.m.–5:00 p.m.
Saturday-Sunday: Closed

American Canyon Library
300 Crawford Way
American Canyon, CA 94503
Hours:
Monday-Friday: 1:00 p.m.–5:00 p.m.
Saturday: 10:00 a.m.–5:30 p.m.
Sunday: Closed

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Mr. Brent Cooper, AICP, Community Development Director
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Phone: 707.647.4335
Email: bcooper@cityofamericancanyon.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the American Canyon Planning Commission on the project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

CHAPTER 2: PROJECT DESCRIPTION

This Draft Environmental Impact Report (Draft EIR) analyzes the potential environmental effects of the proposed Giovannoni Logistics Center Project (proposed project) in American Canyon.

2.1 - Project Location and Setting

2.1.1 - Location

The 208-acre project site is located in the City of American Canyon, in Napa County, California; refer to Exhibit 2-1. The semi-rectangular project site is bounded by industrial development in the Green Island Business Park (west), the Napa Logistics Park and Devlin Road (north), the Napa Branch Line (east), and Green Island Road, a stone supply business, and a wine distribution warehouse (south); refer to Exhibit 2-2. The project site is located on the Cuttings Wharf, California, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 4 North, Range 4 West, Sections 13 and 14 (Latitude 38° 11’ 50” North; Longitude 122° 15’ 36” West).

2.1.2 - Existing Conditions

The project site contains undeveloped land; there are no structures on-site. Vegetation consists primarily of non-native grasslands, with seasonal wetlands and associated plant species scattered throughout the site. The project site gently slopes from east to west and the elevation ranges from 50 feet to 35 feet above mean sea level. The headwaters of No Name Creek are located in the northwestern portion of the site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park Wetland Preserve. The drainage is hydrologically connected to Fagan Slough, which flows into the Napa River. The majority of wetlands that occur throughout the site are supported by direct precipitation. Small soil mounds are located in various places throughout the site.

The West Napa Fault bisects the project site in a northwest/southeast direction. An existing 18-inch diameter force main that connects the Tower Road Pump Station with the Green Island Pump Station crosses the western portion of the project site.

The City of American Canyon owns an approximately 8-acre strip of land that bisects the site north-to-south. This strip of land would support the planned extension of Devlin Road from Middleton Way to Green Island Road, which was under construction as of Summer 2021.

Pursuant to the approval of the Napa Logistics Park Phase 2 EIR, parallel wastewater and recycled water pipelines were constructed through the project site via jack-and-bore technologies in Spring 2021. The pipelines link Napa Logistics Park to the north with the City’s Water Reclamation Facility to the south.

Photographs of the project site are provided in Exhibit 2-3.

2.1.3 - Surrounding Land Uses

West

The California Northern Railroad line connecting American Canyon and Sonoma and the Biagi Brothers distribution warehouse form the western boundary of the project site.

North

Devlin Road and the Napa Logistics Park form the northern boundary of the project site. Napa Logistics Park contains more than 2 million square feet of distribution warehouses as well as a planned Pacific Gas and Electric Company (PG&E) regional operations and maintenance center. Further north is the Napa County Airport.

East

The Napa Branch Line, a railroad that connects American Canyon and Napa, forms the eastern boundary of the project site. East of the branch line are several industrial and commercial businesses that front State Route (SR) 29.

South

Green Island Road, Crown Hill Stone Supply, and the Wine Direct warehouse form the southern boundary of the project site. Further south are industrial and commercial businesses within the Green Island Business Park.

2.1.4 - Land Use Designations

The project site is designated “Industrial” by the City of American Canyon General Plan and zoned “General Industrial.” The project site is within the boundaries of the Napa County Airport Land Use Compatibility Plan.

2.2 - Project History

2.2.1 - Giovannoni Property

Historic topographic maps indicate that the Giovannoni Property has been undeveloped since at least the early 20th Century. The property was annexed into the City of American Canyon in 2005 when the City pre-zoned the site for industrial use. It is the largest undeveloped property designated for industrial land use activities within the American Canyon city limits.

2.2.2 - Napa Logistics Park

The approximately 218-acre Napa Logistics Park property is immediately north of the Giovannoni project site and has been through several rounds of entitlements.

In 2009, Napa County approved the entitlements for Phase 1 of the Napa Logistics Park. These entitlements included a use permit, tentative parcel map, and development agreement for a 646,000-square-foot warehouse on 38 acres of the project site. In 2011, the City of American Canyon

annexed the entire Napa Logistics Park property. The Napa Logistics Park applicant completed the Phase 1 warehouse in 2016 and the building is used as an IKEA customer fulfillment center.

In 2015, the American Canyon City Council certified the Napa Logistics Park Phase 2 EIR and approved entitlements including a use permit, vesting tentative subdivision map, design permits, engineering design exceptions, and a development agreement. The EIR contemplated the development of a 2.27-million-square-foot logistics center on 173 acres of the project site.

In 2017, the Napa Logistics Park applicant requested, and the City of American Canyon approved, the extension of the term of the development agreement to 10 years. The Napa Logistics Park applicant subsequently received design permits for two warehouses (702,000 square feet and 363,000 square feet); the warehouses were developed and are tenanted by Biaggi Bros and Amazon, respectively. The final developable parcel was acquired by PG&E for the development of the Napa Regional Center, a maintenance and operations facility.

2.2.3 - Napa Airport Corporate Center

The approximately 50-acre Napa Airport Corporate Center property is northeast of the Giovannoni project site and has been through several rounds of entitlements.

In 2018, the American Canyon City Council certified the Napa Airport Corporate Center EIR (State Clearinghouse No. 2014122005) and approved entitlements including a use permit, vesting tentative subdivision map, design permits, engineering design exceptions, and a development agreement. The EIR contemplated the development of a 550,000-square-foot business park on the 50-acre project site. The EIR included an option for a fuel station/convenience store/quick serve restaurant in lieu of a warehouse on one of the parcels.

In 2017, prior to the approval of the Napa Airport Corporate Center entitlements, the Napa Vallejo Waste Management Authority (NVWMA) acquired a 15-acre parcel from the property owner. In 2020, the NVWMA Board of Directors approved the development of an enclosed Construction and Demolition Debris Recycling Facility on approximately 9 acres of the parcel. The NVWMA processed an Addendum to the Napa Airport Corporate Center EIR.

2.2.4 - Devlin Road and Napa Valley Vine Trail Extension Project

The City of American Canyon adopted a Mitigated Negative Declaration (State Clearinghouse No. 2018122031) for the Devlin Road and Napa Valley Vine Trail Extension Project on October 1, 2019. The project consisted of the extension of Devlin Road from Green Island Road to Middleton Way (Napa Logistics Park) and associated construction of the Napa Valley Vine Trail along this roadway segment. The extended roadway would have one 14-foot travel lane in each direction and a 12-foot two-way left turn lane. A roundabout would be located at the intersection of Devlin Road/Boone Road. A three-way stop would control the Devlin Road/Green Island Road intersection. The majority of the 3,084-foot segment would be located within the Giovannoni Property.

The City of American Canyon's Circulation Element contemplates the completion of Devlin Road between Green Island Road and Middleton Way (Segment H). The improvement is programmed into

the City's Traffic Impact Fee Program and Capital Improvement Program. The City has been collecting fees from new development projects to pay for Segment H and it is fully funded. The applicant previously dedicated an approximately 8-acre strip of land to the City of American Canyon for this extension. Construction began in Summer 2021.

2.2.5 - Green Island Road Reconstruction and Widening Project

The City of American Canyon adopted a Mitigated Negative Declaration (State Clearinghouse No. 2019089082) for the Green Island Road Reconstruction and Widening Project on October 1, 2019. The project consisted of improvements to a 1.86-mile segment of Green Island Road between SR-29 and a cul-de-sac and include the following:

- Addition of a two-way left turn center lane on Green Island Road (0.80 mile).
- Construction of the Napa Valley Vine Trail Class I bicycle/pedestrian path along the north side of Green Island Road.
- Installation of curb, gutter, and sidewalks at several locations along the roadway corridor.
- Improvement the structural section on the internal roads within existing curb and gutter.
- Reconstruction and improvement of the two at-grade railroad crossings.
- Relocation of existing overhead utilities to a new underground joint trench.
- Installation of light-emitting diode (LED) street lighting.

The City was awarded funding from the United States Department of Commerce Economic Development Administration to pay for the proposed improvements.

2.3 - Project Characteristics

2.3.1 - Project Summary

The applicant, Buzz Oates LLC, is proposing to develop a 2.4-million-square-foot logistics center on approximately 163 acres of the approximately 208-acre project site. The remaining 44.8 acres would be preserved as open space/wetland preserve.

The applicant has developed design-level site plans for Phase 1 of the proposed project, which includes a 94.7-acre area east of the Devlin Road extension. This area will support two high-cube warehouse buildings totaling 1,069,904 square feet. One of the buildings would be rail-served by the adjacent Napa Branch Line. Each building would provide docks, grade level roll-up doors, and trailer parking stalls. The facility would be enclosed with a secure perimeter and access would be restricted to authorized users.

Phase 2 of the proposed project would occur on a 113.1-acre area west of Devlin Road. This area is conceptually proposed for the remaining 1.3 million square feet of high-cube warehouse. Phase 2 would commence once Phase 1 is completed. Accordingly, this environmental document evaluates Phase 1 at a project level and Phase 2 at a program level of analysis. (See Chapter 1, Introduction, and

Section 2.5 below for detailed discussions of the differences between project-level and programmatic analysis, and how the document will be used for future approvals within Phases 1 and 2.)

Table 2-1 summarizes the proposed project. Exhibit 2-4 depicts the preliminary site plan for Phase 1.

Table 2-1: Giovannoni Logistics Center Project Summary

Phase	Acres	Building/Square Feet	End Use/Characteristics
1	94.7	A/627,976	High-Cube Warehouse/36 feet clear height
		B/469,512	High-Cube Warehouse/36 feet clear height
		Subtotal: 1,097,488	–
2	113.1	1.3 million	High-Cube Warehouse/36 feet clear height
Total	**208**	**2.4 million**	–

Notes:
Total acres and square footage values are rounded up.
Source: RMW Architectural Interiors 2020.

2.3.2 - Devlin Road Extension

As previously discussed, the City of American Canyon is extending Devlin Road approximately 3,084 linear feet from Green Island Road to Middleton Way (Napa Logistics Park). The Devlin Road extension is fully funded, the environmental review process was completed in 2019, and construction began in 2021. As such, the Devlin Road extension would be completed prior to Phase 1 of the proposed Giovannoni Logistics Center Project.

The City's Sewer Master Plan contemplates a new 21-inch diameter gravity sewer line that would follow the planned extension of Devlin Road. At Green Island Road, the sewer line would continue west to the new Green Island Pump Station. Once operational, the existing 18-inch diameter force main would be abandoned, along with the Tower Road Pump Station.

The project applicant would construct the Napa Valley Vine Trail segment along the project frontage with Devlin Road frontage.

2.3.3 - Green Island Road Improvements

As previously discussed, the City of American Canyon would improve Green Island Road along the project frontage. The roadway would be widened to provide a two-way left turn lane and half width improvements would be installed along the project frontage, including the Napa Valley Vine Trail. The new Green Island Road/Devlin Road intersection would provide turn lanes. The project applicant would dedicate right-of-way to the City for the Green Island Road widening. The Green Island Road improvements are fully funded, and the environmental review process was completed in 2019. As such, the Green Island Road improvements may be completed prior to Phase 1 of the proposed Giovannoni Logistics Center Project. The project applicant would construct the Napa Valley Vine Trail segment along the project frontage with Green Island Road.

2.3.4 - Vehicular Access

Vehicular access to Phase 1 would be provided via four driveways on Green Island Road and four driveways on Devlin Road. Two driveways on each road would be dedicated for truck access and the remaining two would be dedicated for passenger vehicle access. Reciprocal access would be provided between the two Phase 1 warehouses.

Vehicular access to Phase 2 would occur from both Green Island Road and Devlin Road.

2.3.5 - Parking

Off-street parking spaces for Phase 1 would include standard stalls for passenger vehicles and 55-foot-long stalls for empty truck trailers. Table 2-2 summarizes the assignment of parking spaces by building.

Table 2-2: Phase 1 Parking Summary

Building	Stalls	Notes
A	430	Includes 10 ADA stalls, 26 electric vehicular charging stalls, and nine Clean Air stalls
B	430	Includes 10 ADA stalls, 26 electric vehicular charging stalls, and nine Clean Air stalls
Total	**860**	

Notes:
ADA = Americans With Disabilities Act
Clean Air stalls intended for vanpools and electric vehicles
Source: RMW Architecture Interiors 2020.

2.3.6 - Open Space Preservation

The applicant proposes to establish an Open Space Wetland Preserve (Preserve) to conserve and manage vernal pool and other wetland and grassland resources (including foraging habitat for Swainson's hawk and other birds of prey) in perpetuity; and to offset wetland impacts associated with the proposed project, and additional wetland impacts that may occur in the future as part of the possible development of a second phase of the project (referred to herein as the "Phase 2"), as described in more detail in the Biological Resource section of the Draft EIR, below.

The preserve is proposed to consist of approximately 44.8 acres on the northern portion of the site (Section 3.3, Biological Resources, Exhibit 3.3-4). This area coincides with the portion of the project site where No Name Creek meanders and would create a contiguous open space area with approximately the adjoining 37-acre Napa Logistics Park Wetland Preserve.

The project proposes to establish a conservation easement held by a third-party conservation entity. Additionally, a resource agency approved Wetland Preserve Interim and Long-term Management Plan would be prepared and implemented, which would include monitoring, and the requirement to establish an adequate endowment fund to support in perpetuity conservation and management of the biological resources of the Preserve.

2.3.7 - Storm Drainage

The proposed project would provide 110,766 square feet (2.6 acres) of storm drainage retention on-site. A network of underground piping ranging from 12 to 48-inches in diameter would convey runoff to bioretention and detention basins in the northern portion of the property.

2.3.8 - Utilities

Water

The City of American Canyon would provide potable water and recycled water service to the proposed project. Potable and recycled water infrastructure would be installed within the Devlin Road extension. Service laterals would extend from water lines within Green Island Road and Devlin Road to project buildings.

Wastewater

The City of American Canyon would provide wastewater collection and treatment service to the proposed project. Sewer infrastructure would be installed within the Devlin Road extension. Service laterals would extend from sewer lines within Green Island Road and Devlin Road to project buildings.

Electricity and Natural Gas

Marin Clean Energy would procure, and PG&E would deliver electricity to the proposed project. PG&E would procure and deliver natural gas to the proposed project. Electric and natural gas infrastructure would be installed within the Devlin Road extension. Service laterals would extend from facilities within Green Island Road and Devlin Road to project buildings.

2.3.9 - Grading and Earthwork

Rough grading would require 139,500 cubic yards of cut and 146,900 cubic yards of fill. Utility and development spoils would require 2,000 cubic yards of cut. In total, there would be 141,500 cubic yards of cut and 146,900 cubic yards of fill. Thus, there would be a need for 5,400 cubic yards of fill to be imported to the project site.

2.3.10 - Design and Appearance

Architecture

The warehouse buildings would be of Type VB construction, site cast, tilted concrete panels with a variety of architectural enhancements. The typical wall panels would be enhanced with reveals and a textured elastomeric, multicolored coating system. The areas around the building entries would also be enhanced with tinted glazing in aluminum frames with overhead steel-framed painted canopies. The placement of these enhancements would be focused on those locations most visible from the public roadways. Exhibit 2-5 depicts the conceptual building renderings.

Landscaping

The proposed project would be landscaped using plants adapted to the City of American Canyon climate. Low-water-use plants would primarily be used, with moderate water use plants used at accent points, such as driveways and building entries. The landscape palette will not include oleander because it cannot be composted with other green waste.

2.3.11 - Sustainability Features

The proposed project would incorporate a variety of sustainable materials and construction practices including:

- A stormwater pollution prevention plan to minimize contamination, erosion, and dust pollution during construction. All stormwater runoff from impervious surfaces (roofs and paving) will be routed through a specially designed water quality detention and treatment basin. Additionally, on-site detention will be provided to meet the City of American Canyon standards.
- Storage and collection of recyclable materials.
- Construction waste management including recycling.
- Environmental tobacco smoke control.
- Heat reflecting roof membranes.
- Light pollution reduction.
- Water-efficient landscaping.
- Water use reduction methods.
- Low volatile organic compound (VOC) emitting sealants, adhesives, coatings, floorings, and wood materials.
- Roof structures designed to accommodate additional weight for roof-top photovoltaic electricity generation panel arrays.
- California Green Building Code compliant electric vehicle charging stations at seven locations.
- The application of United States Green Building Council Leadership in Energy and Environmental Design (LEED™) techniques and practices to the project design and construction.
- Covered parking for bicycles

2.3.12 - Employment

The proposed project would employ an estimated 1,200 workers during construction and an estimated 3,643 workers at buildout.

2.3.13 - Buildout Horizon

For the purposes of providing a conservative, worst-case scenario, this Draft EIR assumes that Phases 1 and 2 would be developed concurrently over a period of 18 months.

As a practical matter, the proposed project would buildout over a period of years or decades. Phase 1 would be developed first, followed by Phase 2.

2.4 - Project Objectives and Underlying Purpose

The underlying purpose of the proposed project is to develop industrially zoned undeveloped land within the American Canyon city limits to its highest and best use.

The objectives of the proposed project are to:

1. Promote economic growth in American Canyon by attracting new industries.
2. Promote development that that generates net positive tax revenues for the City by generating more in new tax revenues than are consumed by City expenditures on services provided to the development.
3. Create new employment opportunities for residents of Napa County and the surrounding region.
4. Develop compatible land uses near the Napa County Airport in the interests of avoiding interference with aviation operations.
5. Improve American Canyon's jobs-housing ratio by adding new employment opportunities.
6. Continue the orderly development of the Devlin Road corridor with a well-designed project.
7. Further the goals and policies of the City of American Canyon General Plan by developing land contemplated to support urban development to its highest and best use.
8. Preserve the most biologically sensitive portions of the project site as open space.
9. Install circulation improvements along Green Island Road and Devlin Road that provide efficient ingress and egress to the proposed project while also ensuring these facilities operate at acceptable levels.
10. Promote public safety by incorporating security measures into the project design.
11. Mitigate impacts on the environment through implementation of feasible mitigation measures.

2.5 - Intended Uses of this Draft EIR

This Draft EIR is being prepared by the City of American Canyon to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of American Canyon is the lead agency for the proposed project and has discretionary

authority over the proposed project and project approvals. The Draft EIR is intended to address all future development and public infrastructure improvements that are within the parameters of the proposed project.

This Draft EIR is a combination of a project EIR and a program EIR. The Draft EIR provides a project-level analysis of the environmental effects of Phase 1 and programmatic analysis for Phase 2 of the Project.

The project-level analysis for Phase 1, consistent with CEQA Guidelines Section 15161, provides sufficient detail to allow for approvals of all needed approvals and permitting for, as well as construction of, Phase 1 without any need for additional environmental review, provided that future project changes or changed circumstances do not trigger the need for some sort of subsequent environmental review pursuant to CEQA Guidelines Sections 15162 through 15164 (subsequent EIR, supplement to an EIR, or addendum to an EIR).

The programmatic level of analysis for Phase 2 has been prepared pursuant to CEQA Guidelines Section 15168. Under Section 15168(c), "[l]ater activities in the program must be examined in the light of [a] program EIR to determine whether an additional environmental document must be prepared." Two general outcomes are possible: the later activity may be found to be "within the scope of the project covered by the program EIR," in which case "no new environmental document would be required;" or such a finding cannot be made, and a new project-specific Mitigated Negative Declaration or EIR would be required, depending on the severity of the effects of the later activity.

Section 15168(c)(4) directs that "[w]here the later activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR."

Section 15168(c)(2) provides that "[i]f the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR."

For any later activity covered in whole or in part in the program EIR, "[a]n agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into later activities in the program" (CEQA Guidelines § 15168(c)(2)).

2.5.1 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the City of American Canyon for implementation of the proposed project. The project application would require the following discretionary approvals and actions, including:

- Use Permit
- Tentative Parcel Map
- Design Permits
- Lot Line Adjustment

Subsequent ministerial actions would be required for the implementation of the proposed project, including issuance of grading and building permits.

2.5.2 - Responsible and Trustee Agencies

Several other agencies in addition to the City of American Canyon will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies or parties may include, but are not limited to, the following:

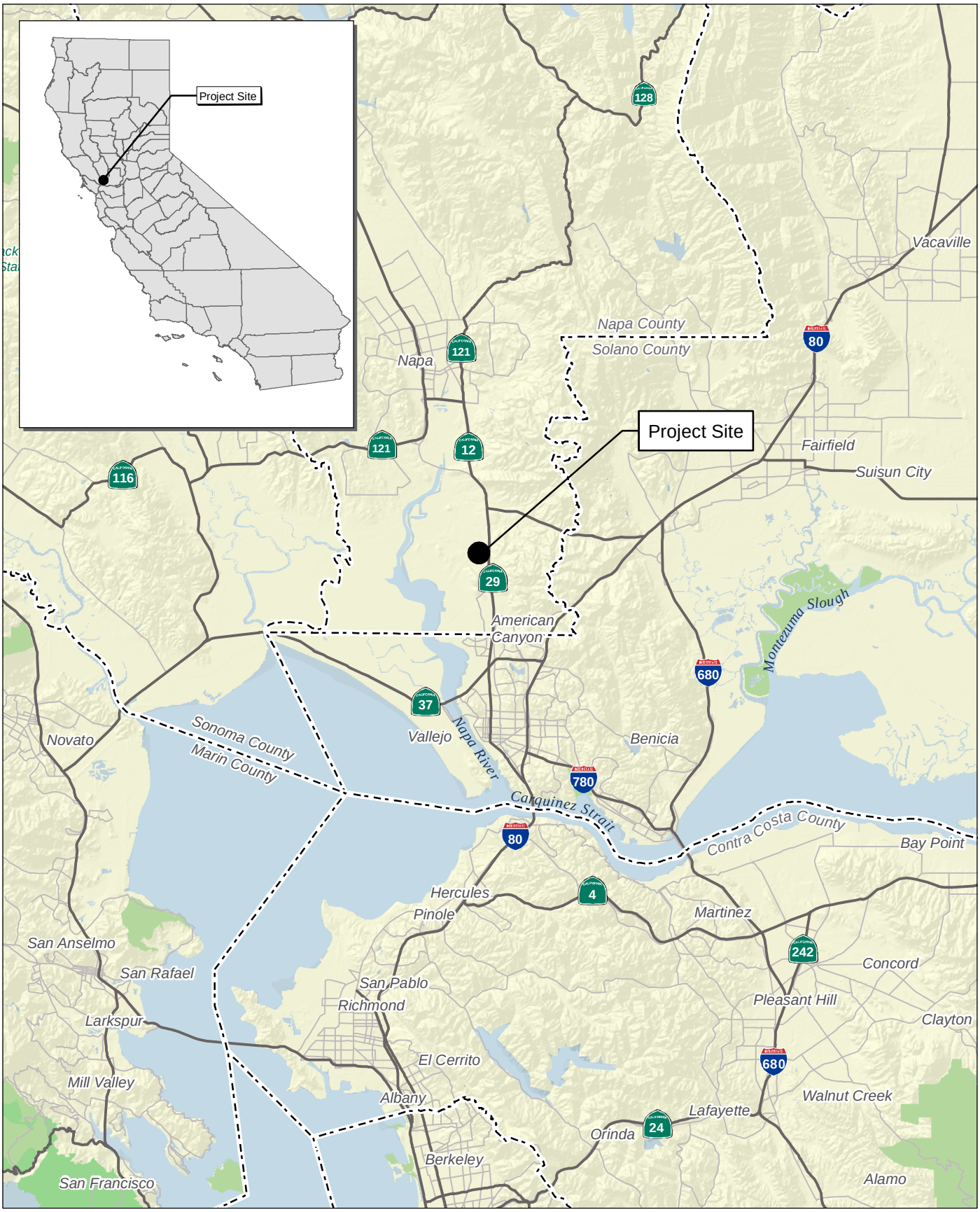
- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans)
- California Public Utilities Commission
- San Francisco Bay Regional Water Quality Control Board (RWQCB)
- Napa County Airport Land Use Commission (ALUC)
- County of Napa
- Napa Valley Transportation Authority/Napa Valley Vine Trail Coalition

Actions that are necessary to implement the project that may be taken by other agencies are:

- Land Use Compatibility Review (ALUC)
- Issuance of Section 1602 Lake and Streambed Alteration Agreement (CDFW)
- Issuance of Section 401 Water Quality Certification (RWQCB)
- Issuance of Encroachment Permit (Caltrans and City of American Canyon)
- Approval of General Order 33-B (California Public Utilities Commission)

This document may also be used by United States Army Corps of Engineers (USACE), to facilitate its compliance with the National Environmental Policy Act (NEPA) in connection with the 404 Permit required for the proposed project under the federal Clean Water Act.

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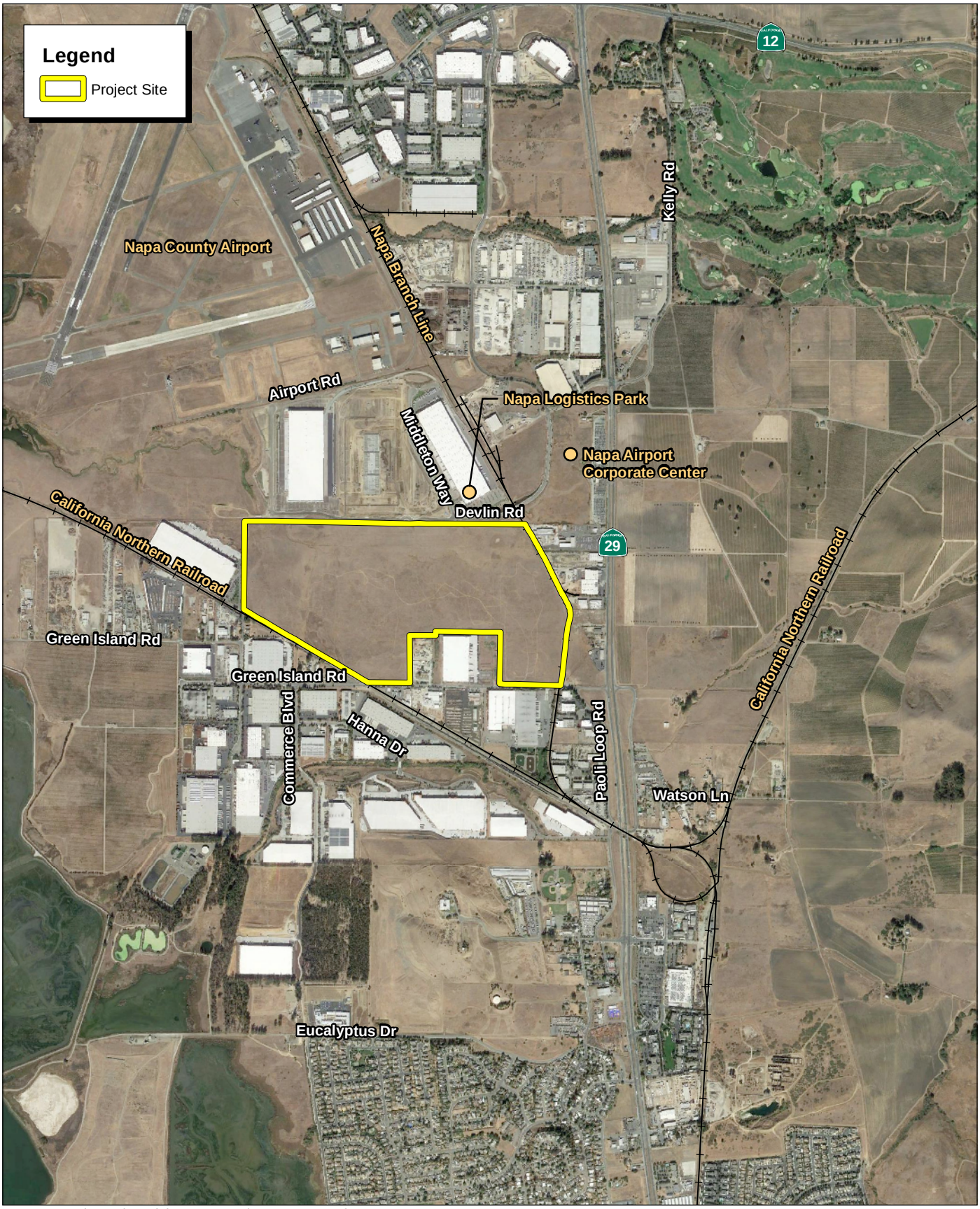
Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5 Miles

Exhibit 2-1
Regional Location Map

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Source: Google Earth Aerial Imagery, 10/2020. County of Napa.

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2,000 1,000 0 2,000 Feet

Exhibit 2-2
Local Vicinity Map

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Photograph 1: View of Phase 1 (eastern) portion of project site.



Photograph 2: View of Phase 2 (western) portion of project site.



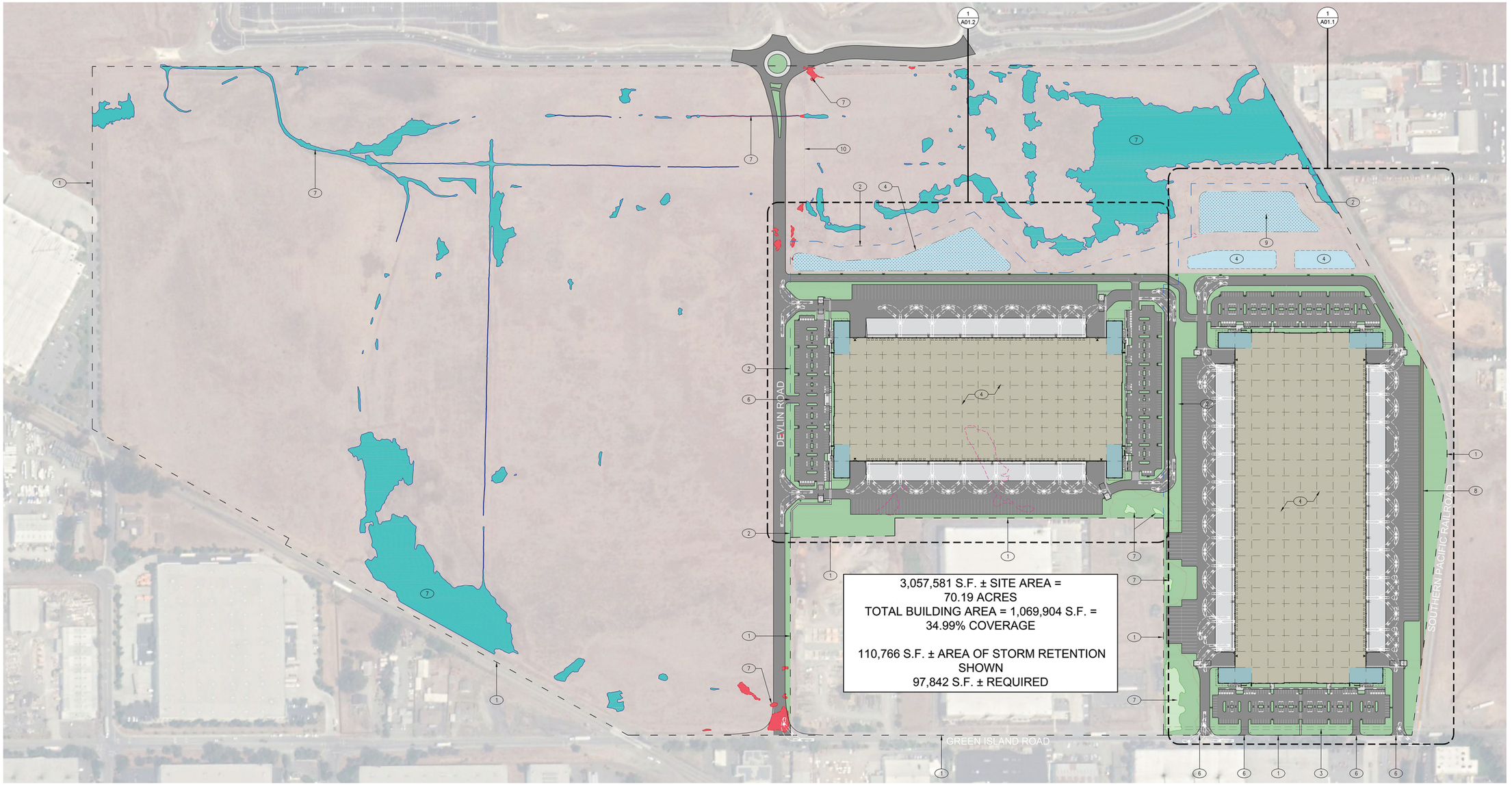
Photograph 3: View of the under construction segment of Devlin Road.

Source: FirstCarbon Solutions, 2021.

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Exhibit 2-3
Site Photographs

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SITE LEGEND:

- BUILDING AREA
- ASPHALT AREA
- STORM WATER RETENTION AREA
- UNAVOIDABLE WETLAND IMPACTS
- WATERS OF THE U.S. WETLANDS
- EXISTING PROPERTY LINE
- 50' WETLAND BUFFER
- 9' X 10' OVERHEAD DOCK LEVEL DOOR
- POTENTIAL OFFICE AREA
- SITE CONCRETE
- LANDSCAPE AREA
- ISOLATED WETLANDS
- DEVLIN RD / GREEN ISLAND RD WETLAND IMPACT
- NEW PARCEL LINE
- NEW RAIL SPUR
- 12' X 14' OVERHEAD GRADE LEVEL DOOR

0 50' 100' 200'

PLAN NORTH

Source: RMW Architecture Interiors, 11/11/2020.

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Exhibit 2-4
Preliminary Site Plan – Phase 1

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BUILDING B



BUILDING A



BUILDING B



BUILDING A

Source: RMW Architecture Interiors, 11/11/2020.

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Exhibit 2-5
Conceptual Renderings

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CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Draft Environmental Impact Report (Draft EIR) provides analysis of impacts for those environmental topics where it was determined in the Notice of Preparation, or through subsequent analysis, that the proposed project would result in "potentially significant impacts." Sections 3.1 through 3.13 discuss the environmental impacts that may result with approval and implementation of the proposed project.

Issues Addressed in this Draft EIR

The following environmental issues are addressed in Chapter 3:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of the California Environmental Quality Act (CEQA). CEQA Guidelines Section 15091 requires that decision-makers mitigate, as completely as is feasible, the significant impacts identified in the Final EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision-makers, approving a project, to adopt a statement of overriding considerations that explains why the benefits of the proposed project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Impact Analysis and Mitigation Measure Format

The format adopted in this EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AES-1:	**An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact number identifies the section of the report (AES for Aesthetics, Light, and Glare in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.**

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to state and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AES-1 Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact it is associated with (AES-1 in this example); mitigation measures are numbered sequentially.

Level of Significance After Mitigation

This section identifies and explains the resulting level of significance of the impact following mitigation.

Abbreviations used in the mitigation measure numbering are:

Code	Environmental Issue
AES	Aesthetics, Light, and Glare
AIR	Air Quality
BIO	Biological Resources
CUL	Cultural and Tribal Cultural Resources
GEO	Geology, Soils, and Seismicity

Code	Environmental Issue
GHG	Greenhouse Gas Emissions and Energy
HAZ	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LU	Land Use
NOI	Noise
PSU	Public Services
TRANS	Transportation
USS	Utilities and Service Systems

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3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential effects from project implementation on visual resources and the site and its surroundings. Descriptions and analysis in this section are based on-site reconnaissance by FirstCarbon Solutions (FCS), as well as review of the City of American Canyon General Plan.

3.1.2 - Environmental Setting

Visual Character

Regional Setting

American Canyon, population 20,837, is located in southern Napa County between the east bank of the Napa River and the Sulfur Springs Mountains foothills. State Route (SR) 29—known locally as Broadway Street—bisects the City from north to south and serves as the primary commercial corridor. Residential uses are generally located in the southern portion of the City, with commercial and industrial uses located in the northern portion near the Napa County Airport. American Canyon is characterized by a contemporary, low-rise, suburban appearance, with most development having occurred within the last 40 years.

Project Site

The approximately 208-acre project site contains undeveloped land. There are no structures on-site. Vegetation consists of grasses and weeds. The project site gently slopes from east to west and the elevation ranges from 50 feet to 35 feet above mean sea level. The headwaters of No Name Creek are located in the northwestern portion of the site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park wetland preserve. Small soil mounds are located in various places throughout the site.

The City of American Canyon owns an approximately 8-acre strip of land that bisects the site north to south. This strip of land would support the planned extension of Devlin Road from Middleton Way to Green Island Road, which was under construction as of Summer 2021.

Chapter 2, Project Description, Exhibit 2-3 provides site photographs.

Surrounding Land Uses

West

The California Northern Railroad line, connecting American Canyon and Sonoma, and the Biagi Brothers distribution warehouse form the western boundary of the project site. The project site has unobstructed views of the railroad tracks and warehouse.

North

Devlin Road and the Napa Logistics Park form the northern boundary of the project site. Napa Logistics Park contains more than 2 million square feet of distribution warehouses as well as a planned Pacific Gas and Electric Company (PG&E) regional operations and maintenance center.

Further north is the Napa County Airport. The project site has unobstructed views of Napa Logistics Park and partial views of the airport.

East

The Napa Branch Line, a railroad that connects American Canyon and Napa, forms the eastern boundary of the project site. East of the branch line are several industrial and commercial businesses that front SR-29. The project site has unobstructed views of the railroad tracks and the businesses that front SR-29.

South

Green Island Road, Crown Hill Stone Supply, and the Wine Direct Warehouse form the southern boundary of the project site. Further south are industrial and commercial businesses in the Green Island Business Park. The project site has unobstructed views of the businesses along the road.

Light and Glare

The project site does not currently contain any sources of light and glare. Parking lot lights that employ full cut-off fixtures are present at the adjoining Wine Direct Warehouse along Green Island Road. Surrounding developed land uses including the Napa Logistics Park, the Wine Direct Warehouse, and the Biagi Brothers distribution warehouse have exterior lighting for safety and security purposes.

3.1.3 - Regulatory Framework

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to aesthetics, light, and glare:

Goal 1B Provide for the orderly development of American Canyon that maintains its distinctive character.

Goal 1C Create a pattern and character of land use development that establishes American Canyon as a distinct “place” differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.

Objective 1.4 Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29, and (d) establishes an overall compact urban form surrounded by open space.

Objective 1.5 Maintain the character and quality of the natural environmental resources of the City and protect the population and development from the adverse impacts of environmental hazards.

Policy 1.22.4 Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following:

a. Architectural treatment of all building elevations;
b. Use of extensive landscape along the primary street frontages and parking lots; and
c. Enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.

Policy 1.22.5 Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following:

a. Inclusion of pedestrian walkways, arcades, and/or other visual elements to interconnect individual buildings;
b. Differentiation of building facades by materials, color, architectural details and modulation of building volumes;
c. Incorporation of extensive landscape in parking areas, along building frontages, and other public areas;
d. Use of consistent and well-designed public and informational signage; and
e. Installation of elements that define the key entries to the industrial district.

3.1.4 - Methodology

FCS evaluated potential aesthetics, light, and glare impacts through site reconnaissance conducted in February 2021, as well as review of the City of American Canyon General Plan and project plans.

3.1.5 - Thresholds of Significance

Appendix G to the California Environmental Quality Act (CEQA) Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts to aesthetics are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect related to aesthetics if the proposed project would:

a) Have a substantial adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway. (Refer to Section 7, Effects Found not to be Significant.)

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).

d) In an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

e) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Scenic Vistas

Impact AES-1:	**The proposed project would not have a substantial adverse effect on a scenic vista.**

Impact Analysis

Phases 1 and 2

The approximately 208-acre project site contains undeveloped land. There are no structures on-site. Vegetation consists of grasses and weeds. The project site gently slopes from east to west and the elevation ranges from 50 feet to 35 feet above mean sea level. The headwaters of No Name Creek are located in the northwestern portion of the site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park wetland preserve. Small soil mounds are located in various places throughout the site.

A scenic vista is defined as a viewing point that provides expansive views of a highly valued landscape available to the general public. Scenic resources are defined as those landscape patterns and features that are visually or aesthetically pleasing and that, therefore, contribute positively and define a distinct community or region. Neither the City of American Canyon nor the Napa County General Plan identifies the project site as a scenic vista or scenic resource. Additionally, the project site does not contain any scenic vistas or features associated with scenic vistas (e.g., ridgelines, peaks, overlooks), nor are any such views visible from the project site.

The project site is located in a portion of the City of American Canyon that is generally not visible from park and recreational areas, community gathering facilities, or residential areas. There are no prominent long-distance views of the project site, and, as such, the proposed project would not have the potential to obstruct views from high vantage points or sensitive viewpoints of the City.

In summary, the proposed project would not adversely affect views to or from a scenic vista. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Visual Character

Impact AES-2:	**The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.**

Impact Analysis

The approximately 208-acre project site contains undeveloped land. There are no structures on-site. Vegetation consists of grasses and weeds. The project site gently slopes from east to west and the elevation ranges from 50 feet to 35 feet above mean sea level. The headwaters of No Name Creek are located in the northwestern portion of the site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park wetland preserve. Small soil mounds are located in various places throughout the site.

The project vicinity includes Napa Logistics Park, the Green Island Business Park, two railroad lines, and the Napa County Airport. Generally, the project vicinity can be characterized as an active, contemporary industrial area.

Phase 1

Phase 1 consists of the development of 1,069,904 square feet of high-cube warehouse on 94.7 acres of the eastern portion of the project site. Two warehouse buildings would be developed (627,976 square feet and 469,512 square feet). The larger building would be rail-served by the adjacent Napa Branch Line. Both buildings would provide docks, grade-level roll-up doors, and trailer parking stalls. The facility would be enclosed with a secure perimeter.

The high-cube warehouse buildings would be of Type VB construction, site cast, tilted concrete panels with a variety of architectural enhancements. The typical wall panels would be enhanced with reveals and a textured elastomeric, multicolored coating system. The roof would support mechanical equipment for the heating, ventilation, and air conditioning (HVAC) system screened with a roof parapet and/or with roof screens equal in height to the mechanical equipment. The areas around the building entries would also be enhanced with tinted glazing in aluminum frames with overhead steel-framed painted canopies. The placement of these enhancements would be focused at those locations most visible from the public roadways. Chapter 2, Project Description, Exhibit 2-5 depicts the building renderings.

The Phase 1 warehouses would be similar in appearance to the structures in the neighboring Napa Logistics Park and the Green Island Business Park.

Additionally, a 44.8-acre open space area containing No Name Creek and wetlands would be permanently preserved within the northern portion of the site. These are the most significant aesthetic features on the project site.

Phase 2

Phase 2 would support up to 1.3 million square feet of high-cube warehouse on 113.1 acres of the western portion of the project site. Phase 2 is conceptual and no design-level plans have been prepared at the time of this writing. It would be expected that the Phase 2 buildings would be similar in appearance to the Phase 1 buildings.

Conclusion

Although the development of the proposed project would fundamentally and irreversibly change the visual character of the project site, it would be compatible with surrounding uses and consistent with the City of American Canyon General Plan land use designation of "Industrial" for the project site. Therefore, the proposed project would not substantially degrade the visual quality of the project area or its surroundings, and the impact related to changed character would be considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Light and Glare

Impact AES-3:	**The proposed project may create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Impact Analysis

Phases 1 and 2

The project site does not currently contain any sources of light and glare. Parking lot lights that employ full cut-off fixtures are present in the adjoining Wine Direct Warehouse along Green Island Road. Nearby developed land uses, including Napa Logistics Park and the industrial uses south of Green Island Road, have exterior lighting for safety and security purposes.

The development of the proposed project would result in the installation of new sources of light and glare on the project site. These new sources of light include additional street lighting along internal roadways, building-mounted light fixtures, and pole-mounted light fixtures within parking areas. Additionally, illuminated signage may be employed. Mitigation Measure (MM) AES-3 requires the project applicant to prepare and submit a photometric plan to the City of American Canyon for review and approval to demonstrate that all exterior light fixtures would be directed downward or employ full cut-off fixtures to minimize light spillage and avoid interference with aviation operations

at the Napa County Airport. Downward-directed lighting and full cut-off fixtures would prevent the trespass of light and glare onto neighboring properties or conflict with aviation operations. With the implementation of this mitigation measure, potential light and glare impacts would be reduced to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AES-3 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 which demonstrates that all exterior light fixtures would be directed downward or employ full cut-off fixtures to minimize light spillage and avoid interference with aviation operations at the Napa County Airport. The approved plan shall be incorporated into the proposed project.

Level of Significance After Mitigation

Less than significant impact.

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3.2 - Air Quality

3.2.1 - Introduction

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section also evaluates the possible impacts related to air quality that could result from the implementation of the project. The information included in this section is based on project-specific air quality modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2020.4.0, the American Meteorological Society (AMS)/United States Environmental Protection Agency (EPA) Regulatory Model (AERMOD) air dispersion model (Version 21112). Complete modeling output is provided in Appendix B. The following comments related to Air Quality were received during the Notice of Preparation (NOP) scoping period:

- The Environmental Impact Report (EIR) should carefully assess and mitigate the proposed project's impacts on air quality.
- Because of the proposed project's proximity to residences and schools already disproportionately burdened by multiple sources of air pollution, the EIR should address the potential cumulative health impacts associated with the construction and operation of the proposed project.
- The EIR should specifically quantify and discuss the potential cancer risks from on-site Transport Refrigeration Units.

3.2.2 - Environmental Setting

Regional Geography and Climate

The City of American Canyon is located within the San Francisco Bay Area Air Basin (Air Basin or SFBAAB). The Air Basin is approximately 5,600 square miles in area and consists of nine counties that surround the San Francisco Bay, including all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties; the southwestern portion of Solano County; and the southern portion of Sonoma County. The San Francisco Bay Area (Bay Area) has a Mediterranean climate characterized by mild, dry summers and mild, moderately wet winters, moderate daytime onshore breezes, and moderate humidity.

A semi-permanent, high-pressure area centered over the northeastern Pacific Ocean dominates the summer climate of the West Coast. Because this high-pressure cell is persistent, storms rarely affect the California coast during the summer. Thus, the conditions that persist along the coast of California during summer are a northwest airflow and negligible precipitation. A thermal low-pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the Bay Area much of the summer.

The steady northwesterly flow around the eastern edge of the Pacific High (a high-pressure cell) exerts stress on the ocean surface along the West Coast. This airflow pattern induces upwelling of cold water from below the surface. Upwelling produces a band of cold water off San Francisco that is approximately 80 miles wide. During July, the surface waters off San Francisco are 3°F (degrees Fahrenheit) cooler than those off Vancouver, British Columbia, more than 900 miles to the north. Air

approaching the California coast, already cool and moisture-laden from its long trajectory over the Pacific Ocean, is further cooled as it flows across this cold bank of water near the coast, thus accentuating the temperature contrast across the coastline. This cooling is often sufficient to produce condensation, creating a high incidence of fog and stratus clouds along the Northern California coast in summer.

In summer, the northwest winds to the west of the Pacific coastline are drawn into the interior through the gap in the western Coast Ranges, known as the Golden Gate,[1] and over the lower portions of the San Francisco Peninsula. Immediately to the south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more nearly from the west as they stream through the Golden Gate. This channeling of the flow through the Golden Gate produces a jet that sweeps eastward but widens downstream, producing southwest winds at Berkeley and northwest winds at San José; a branch also curves eastward through the Carquinez Straits and into the Central Valley. Wind speeds may be locally strong in regions where air is channeled through a narrow opening such as the Golden Gate, the Carquinez Strait, or San Bruno Gap. For example, the average wind speed at San Francisco International Airport from 3:00 a.m. to 4:00 p.m. in July is about 20 miles per hour (mph), compared with only about 8 mph at San José and less than 7 mph at the Farallon Islands.

The sea breeze between the coast and the Central Valley[2] commences near the surface along the coast in late morning or early afternoon; it may first be observed only through the Golden Gate. Later in the day, the layer deepens and intensifies while spreading inland. As the breeze intensifies and deepens, it flows over the lower hills farther south along the peninsula. This process frequently can be observed as a bank of stratus clouds "rolling over" the coastal hills on the west side of the Bay. The depth of the sea breeze depends in large part upon the height and strength of the inversion. The generally low elevation of this stable layer of air prevents marine air from flowing over the coastal hills. It is unusual for the summer sea breeze to flow over terrain exceeding 2,000 feet in elevation.

In winter, the SFBAAB experiences periods of storminess, moderate-to-strong winds, and periods of stagnation with very light winds. Winter stagnation episodes are characterized by outflow from the Central Valley, nighttime drainage flows in coastal valleys, weak onshore flows in the afternoon, and otherwise light and variable winds.

A primary factor in air quality is the mixing depth (the vertical air column available for diluting contaminant sources). Generally, the air temperature decreases with height, creating a gradient from warmer air near the ground to cooler air at elevation caused by the sun converting large amounts of energy to sensible heat at the ground, which warms the air at the surface. The warm air rises in the atmosphere, where it expands and cools. Sometimes, however, the temperature of air increases with height. This condition is known as a temperature inversion because the atmosphere's temperature profile is "inverted" from its usual state. Over the SFBAAB, the frequent occurrence of temperature inversions limits mixing depth and, consequently, limits the availability of air for dilution.

[1] A strait on the West Coast of North America that connects the San Francisco Bay to the Pacific Ocean.

[2] A flat valley that dominates the geographical center of California stretching 450 miles from north-northwest to south-southeast, inland from and parallel to the Pacific Ocean coast. It is bound by the Sierra Nevada to the east and the Coast Range to the west.

Air Pollutant Types, Sources, and Effects

Criteria Air Pollutants

Air pollutants are termed criteria air pollutants if they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. Table 3.2-1 provides a summary of the types, sources, and effects of criteria air pollutants.

Table 3.2-1: Description of Criteria Pollutants of National and California Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO_X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; change breathing pattern; reduce breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; induce some immunological changes; increase mortality risk; damage to vegetation and property.
Particulate matter (PM_{10}) Particulate matter ($PM_{2.5}$)	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Suspended particulate matter sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; the use of metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.
Nitrogen dioxide (NO_2)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5).	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and can result in PM-related health effects.	dioxide forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential woodburning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO_2)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor similar to rotten eggs. Sulfur oxides (SO_X) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human-caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment,

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	standards at any monitoring station since 1982.	from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	learning deficiencies, and low IQs.

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Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs) are also used as indicators of air quality conditions. TACs are defined as air pollutants that may cause or contribute to an increase in mortality or serious illness or pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at very low concentrations. TACs can cause long-term health effects (such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) or short-term acute affects (such as eye watering, respiratory irritation, runny nose, throat pain, or headaches). For TACs that may cause

cancer, all concentrations present some risk. In other words, there is no threshold level below which some adverse health impacts are not expected to occur. This contrasts with the criteria pollutants such as nitrogen dioxide and carbon dioxide for which acceptable levels of exposure can be determined. The State and federal governments set ambient air quality standards.

TACs are separated into carcinogens and noncarcinogens based on the physiological effects associated with exposure to a particular TAC. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Cancer risk is typically expressed as excess cancer cases per million exposed individuals over a lifetime exposure or other prolonged duration. There is generally an assumed safe level of exposure for noncarcinogenic substances below which no negative health impact is believed to occur. These levels may vary depending on the specific pollutant. Acute and chronic exposure to noncarcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to an acceptable reference exposure level (REL).

To date, the California Air Resources Board (ARB) has designated nearly 200 compounds as TACs. The ARB has implemented control measures for several compounds that pose high risks and show potential for effective control. The majority of the estimated health risk from TACs can be attributed to a relatively few compounds, the most important being diesel particulate matter (DPM) from diesel-fueled engines. Common TACs of national and California concern include DPM, reactive organic gases (ROG), benzene, asbestos, hydrogen sulfide, sulfates, visibility-reducing particulates, vinyl chloride, and lead. Table 3.2-2 provides a summary of the types, sources, and effects of TACs.

Table 3.2-2: Description of Toxic Air Contaminants of National and California Concern

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Diesel particulate matter (DPM)	DPM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total PM mass, which consists of compounds such as hydrocarbons and their derivatives and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient PM pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.	Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
VOCs	ROGs, or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.	Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as TACs.
Benzene	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a "Group A" carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at one to 2 percent by volume. The primary route of human exposure is through inhalation.	Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.
Asbestos	Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of	Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained	Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	asbestos are chrysotile, amosite, and crocidolite.	in buildings in the United States.	during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.
Hydrogen Sulfide	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.
Sulfates	Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.	Sulfates can cause a decrease in ventilatory function, aggravation of asthmatic symptoms; and aggravation of cardio-pulmonary disease, as well as vegetation damage, degradation of visibility, property damage.
Visibility-Reducing Particles	Suspended PM is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; the use of metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure can result in reduced lung function, chronic bronchitis, changes in lung morphology, and death.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	
Vinyl Chloride	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the California Air Resources Board (ARB) identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure

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Air Quality

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality.

Regional Air Quality

The Bay Area Air Quality Management District (BAAQMD) is the regional agency regulating air quality within the nine-county SFBAAB. The SFBAAB includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the western portion of Solano County, and the southern portion of Sonoma County.

Air Pollutant Standards and Attainment Designations

Air pollutant standards have been adopted by the EPA and the ARB for the following six criteria air pollutants that affect ambient air quality: ozone, NO_2, CO, SO_2, lead, and particulate matter (PM), which is subdivided into two classes based on particle size: PM with aerodynamic diameters equal to or less than 10 microns (PM_{10}), and PM with aerodynamic diameters equal to or less than 2.5 microns ($PM_{2.5}$). These air pollutants are called "criteria air pollutants" because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. California has also established standards for TACs such as visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Table 3.2-3 presents the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for these aforementioned air pollutants. Note that there are no State or federal ambient air quality standards for ROGs, benzene, or DPM.

Table 3.2-3: Federal and State Air Quality Standards in the SFBAAB

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]
Ozone	1 Hour	0.09 ppm	—
	8 Hour	0.070 ppm	0.070 ppm[f]
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm
	Annual	0.030 ppm	0.053 ppm
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm
	3 Hour	—	0.5 ppm
	24 Hour	0.04 ppm	0.14 (for certain areas)
	Annual	—	0.030 ppm (for certain areas)
Lead[e]	30-day	1.5 µg/m^3	—
	Quarter	—	1.5 µg/m^3
	Rolling 3-month average	—	0.15 µg/m^3
Particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3
	Mean	20 µg/m^3	—
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3
	Annual	12 µg/m^3	12.0 µg/m^3
Visibility-reducing particles	8 Hour	See note below[d]	
Sulfates	24 Hour	25 µg/m^3	—
Hydrogen sulfide	1 Hour	0.03 ppm	—
Vinyl chloride[e]	24 Hour	0.01 ppm	—

Notes:
ppm = parts per million (concentration) µg/m^3 = micrograms per cubic meter Annual = Annual Arithmetic Mean
30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 part per billion (ppb). The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]

[e] The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for implementing control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015, and became effective on December 28, 2015.

Source: California Air Resources Board (ARB). 2016. Ambient Air Quality Standards. May 4. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed May 18, 2021.

Air quality monitoring stations operated by the ARB and BAAQMD measure ambient air pollutant concentrations in the SFBAAB. In general, the SFBAAB experiences low concentrations of most pollutants compared to federal or State standards.

Both the EPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. These designations identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. "Attainment" status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. "Nonattainment" refers to regions that do not meet federal and/or State standards for a specified criteria pollutant. "Unclassified" refers to regions with insufficient data to determine the region's attainment status for a specified criteria air pollutant. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

Table 3.2-4 shows the current attainment designations for the SFBAAB. The SFBAAB is designated as nonattainment for the State ozone, PM_{10}, and $PM_{2.5}$, standards and the national ozone and $PM_{2.5}$ standards.

Table 3.2-4: San Francisco Bay Area Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	N/A
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Nonattainment	Nonattainment
Sulfates	Attainment	N/A
Hydrogen Sulfates	Unclassified	N/A

Pollutant	State Status	National Status
Visibility-reducing Particles	Unclassified	N/A
Lead	N/A	Attainment
Notes: N/A = information not available. Source: Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. January 5. Website: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. Accessed May 18, 2021.		

Air Quality Index

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest comparison is to the State and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 3.2-5 provides a general description of the health impacts of ozone at different concentrations.

Table 3.2-5: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI—0–50—Good	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 0–54 ppb	**Health Effects Statements**: None.
	Cautionary Statements: None.
AQI—51–100—Moderate	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 55–70 ppb	**Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI—101–150—Unhealthy for Sensitive Groups	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 71–85 ppb	**Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults, and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI—151–200—Unhealthy Concentration 86–105 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI—201–300—Very Unhealthy Concentration 106–200 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Source: Air Now. N.d. AQI Calculator: AQI to Concentration Calculator. Website: https://www.airnow.gov/aqi/aqi-calculator. Accessed May 18, 2021.	

Local Air Quality

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality.

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. The air quality monitoring station closest to the project site is the Napa Valley College Air Monitoring Station, located approximately 5.5 miles north of the project site. Table 3.2-6 summarizes the recorded ambient air data at the representative monitoring stations for the years 2017 through 2019, which is the most current data available at the time of this analysis. As the Napa Valley College Air Monitoring Station does not have recorded data for 2017, the next closest monitoring station, Vallejo-304 Tuolumne Street Monitoring Station, approximately 6.5 miles south of the project site, was selected to identify the region's air quality in 2017. As Table 3.2-6 shows, the recorded data show exceedances of the California standards for ozone (1-hour and 8-hour) and PM_{10}, and national standards for 8-hour ozone, $PM_{2.5}$, and $PM_{10,}$ on multiple occasions from 2017 to 2019. No exceedances of either the State or national standards were recorded for CO, NO_2, or SO_2. No recent monitoring data for Napa County or the SFBAAB was available for CO or SO_2. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3.2-6: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2017	2018	2019
Ozone[1]	1 Hour	Max 1 Hour (ppm)	**0.105**	0.083	**0.095**
		Days > State Standard (0.09 ppm)	**1**	0	**1**
	8 Hour	Max 8 Hour (ppm)	**0.089**	0.068	**0.076**
		Days > State Standard (0.07 ppm)	**2**	0	**2**
		Days > National Standard (0.070 ppm)[2]	**2**	0	**2**
CO	8 Hour	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
NO_2[1]	Annual	Annual Average (ppm)	0.008	ND	0.001
	1 Hour	Max 1 Hour (ppm)	0.049	0.040	0.040
		Days > State Standard (0.18 ppm)	0	0	0
SO_2	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hour	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM_{10})[1]	Annual	Annual Average (µg/m^3)	11.5	12.7	13.5
	24 Hour	Max 24 Hour (µg/m^3)	ND	26.0	39.0
		Days > State Standard (50 µg/m^3)	ND	ND	ND
		Days > National Standard (150 µg/m^3)	ND	ND	0
Fine particulate matter ($PM_{2.5}$)[1]	Annual	Annual Average (µg/m^3)	11.7	ND	6
	24 Hour	24 Hour (µg/m^3)	**101.9**	**117.9**	21.5
		Days > National Standard (35 µg/m^3)	**9**	ND	0

Notes:
> = exceed ppm = parts per million µg/m^3 = micrograms per cubic meter
ID = insufficient data ND = no data max = maximum
Bold = exceedance
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
[1] San Pablo-Rumrill Boulevard
[2] On October 1, 2015, the EPA strengthened the NAAQS for ground-level ozone to 70 parts per million through the adoption of a new standard. The Final Rule went into effect on December 28, 2015.
Source: California Air Resources Board (ARB). 2018. iADAM: Top 4 Summary. Website: https://www.arb.ca.gov/adam/select8/sc8start.php. Accessed July 29, 2021.

Sensitive Receptors

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others are. Land uses such as residences, schools, day

care centers, hospitals, nursing and convalescent homes, and parks are considered the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would receive exposure to air pollution 24 hours per day, 350 days per year, for 70 years. BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, day care centers, hospitals, and senior-care facilities.

Project Vicinity

The closest off-site air pollution sensitive receptors near the project site in each direction include the following:

- A single-family residence approximately 200 feet southwest of the project site.
- A single-family residence approximately 3,150 feet west of the project site.
- A residential neighborhood approximately 2,510 feet south of the project site.
- A single-family residence approximately 1,790 feet east of the project site.
- A single-family residence approximately 1,860 feet northeast of the project site.
- Calvary Baptist Christian Academy approximately 4,040 feet south of the project site.

Project Site

The project site is vacant and no sensitive receptors currently exist on the project site.

Existing Emission Sources

Project Vicinity

The primary sources of air pollutants (both criteria air pollutant and TACs) in the project site vicinity include the various other surrounding industrial properties, building-related energy use, and motor-related vehicle trips associated with the local business use, particularly on State Route (SR) 29. The project site is located approximately 660 feet west of SR-29 and approximately 2,430 feet southeast of Napa County Airport. Other activities that result in emissions include space and water heating, landscape maintenance, and any surrounding industrial uses that can store, produce, decommission, or otherwise handle hazardous materials.

Project Site

The project site itself is currently vacant and does not produce any air pollutants.

3.2.3 - Regulatory Framework

Federal

Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are PM, ground-level ozone, CO, sulfur oxides, nitrogen oxides, and lead. The EPA calls these pollutants criteria air pollutants because it regulates them by developing

human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards.[3] The federal standards are called NAAQS. The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal CAA Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

EPA Emission Standards for New Off-Road Equipment

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

State

California Air Quality Control Plan (State Implementation Plan)

An SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air quality standards. The ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention, administers the SIP for the State of California. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality

[3] United States Environmental Protection Agency (EPA). 2014. Clean Air Act Requirements and History. Website: https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history. Accessed May 18, 2021.

monitoring), control measures and strategies, and enforcement mechanisms for attaining and maintaining air quality standards.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards.

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers the CAAQS for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above and visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own more stringent regulations than similar federal regulations implementing the CAA for motor vehicles and other sources. Generally, the planning requirements of the CCAA are more stringent than the federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

Other ARB responsibilities include, but are not limited to, overseeing local air district compliance with California and federal laws; approving local air quality plans; submitting SIPs to the EPA; monitoring air quality; determining and updating area designations and maps; conducting basic research aimed at providing a better understanding between emissions and public well-being, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Health and Safety Code Section 39655 and California Code of Regulations Title 17 Section 93000 (Substances Identified as Toxic Air Contaminants)

The ARB identifies substances as TACs as defined in Health and Safety Code Section 39655 and listed in Title 17, Section 93000 of the California Code of Regulations, "Substances Identified As Toxic Air Contaminants." A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness or pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there are thresholds set by regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is DPM from diesel-fueled engines.

California Low-Emission Vehicle Program

The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012, the ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.[4]

California On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.[5]

California In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and privately and publicly owned school buses with a gross vehicle weight of greater than 14,000 pounds. The regulation provides various flexibility options tailored to fleets operating low-use

[4] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed May 18, 2021.

[5] California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed May 18, 2021.

vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[6]

California Airborne Toxic Control Measures for Asbestos

The ARB has adopted Airborne Toxic Control Measures (ATCM) for sources that emit a particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions.

In July 2001, the ARB approved an ATCM for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires applying Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district before ground-disturbing activities. The measure establishes specific testing, notification, and engineering controls before grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district before the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an ATCM for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site with the areas more likely to contain naturally occurring asbestos are approximately 2 miles southeast of the project site.[7]

[6] California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed May 18, 2021.

[7] United States Geological Survey (USGS). 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California Map.

California Airborne Toxic Control Measures for Transport Refrigerated Units

The ARB also has an ATCM for in-use diesel-fueled Transport Refrigeration Units (TRUs) and generator sets, which establishes performance targets for TRUs. TRUs are trailer-mounted units, powered by small diesel-fueled engines, which provide chilled air to tailers carrying perishable goods (e.g., produce, meats, and prescription drugs). The measure regulates PM emissions rates from TRUs powered by diesel internal combustion engines that range from 9 to 36 horsepower. According to the regulation, facilities with over 20 loading docks must submit a detailed report specifying the types of models and quantities of TRUs that would operate at the facility. The report is filed by the equipment operator and is submitted electronically to the ARB. By July 31, 2009, owners and operators of California-based TRUs were required to submit an application for an ARB identification number as part of the ARB Identification Numbering Requirements. By December 31, 2021, owners and operators of California-based TRUs must submit documentation demonstrating that TRUs with a model year 2013 or newer meet the Ultra Low-Emission TRU in-use standard by the end of the seventh year after the engine model year.

Verified Diesel Emission Control Strategies

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

California Diesel Risk Reduction Plan

The ARB Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions in 2020 by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010 and 85 percent by 2020.[8]

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

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

Carl Moyer Memorial Air Quality Standards Attainment Program

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

[8] California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf. Accessed May 18, 2021.

pollution. Money collected through the Carl Moyer Program complements California's regulatory program by providing incentives to effect early or extra emission reductions, especially from emission sources in environmental justice communities and areas disproportionately affected by air pollution. The program has established guidelines and criteria for the funding of emissions reduction projects. Within the San Francisco Bay Area Air Basin (Air Basin), the BAAQMD administers the Carl Moyer Program. The program has established guidelines and criteria for the funding of emissions reduction projects. Within the Air Basin, the BAAQMD administers the Carl Moyer Program. The program establishes cost-effectiveness criteria for funding emission reductions projects, which under the final 2017 Carl Moyer Program Guidelines are $30,000 per weighted ton of NO_X, ROG, and PM.[9]

California Refrigerant Management Program

California's Refrigerant Management Program (RMP) regulates refrigerants used in larger facilities, primarily industrial and supermarket land uses. Refrigerants regulated under the RMP include any refrigerant that is an ozone depleting substance as defined in Title 40 of the Code of Federal Regulation, Part 82, and any compound with a global warming potential (GWP) value equal to or greater than 150 according to the GWPs specified in the United Nations Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report of 2007. According to the RMP, all supermarket and industrial refrigeration systems with a full recharge capacity of 50 pounds (22.7 kilograms) or greater will be required to limit the refrigerants used to no greater than 150 GWP beginning in 2022. Similarly, according to the RMP, all room air conditioning unit systems with a full recharge capacity of 50 pounds or greater will be required to limit the refrigerants used to no greater than 750 GWP beginning in 2023.[10]

Regional

BAAQMD California Environmental Quality Act Air Quality Guidelines

The BAAQMD is the primary agency responsible for ensuring that air quality standards (NAAQS and CAAQS) are attained and maintained in the SFBAAB through comprehensive planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB and prepares ozone attainment plans for the national ozone standard, clean air plans for the California standard, and PM plans to fulfill federal air quality planning requirements. The BAAQMD also inspects stationary sources of air pollution; responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA and the CCAA.

The BAAQMD developed quantitative thresholds of significance for its California Environmental Quality Act (CEQA) Guidelines in 2010, which were also included in its updated 2011 Guidelines. The BAAQMD's adoption of the 2010 thresholds of significance was later challenged in court. In an opinion issued on December 17, 2015, related to the BAAQMD CEQA Guidelines, the California Supreme Court held that CEQA does not generally require an analysis of the impacts on project

[9] California Air Resources Board (ARB). 2017. 2017 Carl Moyer Program Guidelines. Website: California Air Resources Board (ARB). 2017. 2017 Carl Moyer Program Guidelines. Accessed May 19, 2021.

[10] California Air Resources Board (ARB). 2020. Proposed Amendments to ARB's HFC Regulation. December 10. Website: https://ww3.arb.ca.gov/board/books/2020/121020/20-13-4pres.pdf. Accessed September 10, 2021.

residents and users of locating development in areas subject to environmental hazards unless the proposed project would exacerbate those existing environmental hazards (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377-378). The California Supreme Court also found that specific legislation within CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing (*Id*. at pp. 391-392). On N remand from the California Supreme Court, the Court of Appeal later held that public agencies remain free to voluntarily conduct this analysis not required by CEQA for their own public projects (*CBIA v. BAAQMD (2016) 2 Cal.App.5th 1067, 1083*).

In view of the California Supreme Court's opinion, the BAAQMD published a new version of its CEQA Guidelines in May 2017. The BAAQMD CEQA Guidelines state that local agencies may rely on thresholds designed to reflect the impact of locating development near areas of toxic air contamination where CEQA requires such an analysis or where the agency has determined that such an analysis would assist in making a decision about the proposed project. However, the thresholds are not mandatory, and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts. The BAAQMD's guidelines for implementing the thresholds are for informational purposes only, to assist local agencies.

BAAQMD Particulate Matter Plan

To fulfill federal air quality planning requirements, the BAAQMD adopted a $PM_{2.5}$ emissions inventory for the year 2010 at a public hearing on November 7, 2012. The Bay Area Clean Air Plan also included several measures for reducing PM emissions from stationary sources and woodburning. On January 9, 2013, the EPA issued a final rule determining that the Bay Area has attained the 24-hour $PM_{2.5}$ NAAQS, suspending federal SIP planning requirements for the SFBAAB.[11] Despite this EPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour $PM_{2.5}$ standard until the BAAQMD submits a redesignation request and a maintenance plan to the EPA and the EPA approves the proposed redesignation.

The Air Basin is designated nonattainment for the State PM_{10} and $PM_{2.5}$ standards, but the Air Basin is currently unclassified for the federal PM_{10} standard and nonattainment for federal $PM_{2.5}$ standards. The EPA lowered the 24-hour $PM_{2.5}$ standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ in 2006 and designated the Air Basin as nonattainment for the new $PM_{2.5}$ standard effective December 14, 2009.

On December 8, 2011, the ARB submitted a "clean data finding" request to the EPA on behalf of the Bay Area. If the clean data finding request is approved, then EPA guidelines provide that the region can fulfill federal $PM_{2.5}$ SIP requirements by preparing either a redesignation request and a $PM_{2.5}$ maintenance plan, or a "clean data" SIP submittal. Because peak $PM_{2.5}$ levels can vary from year to year based on natural, short-term changes in weather conditions, the BAAQMD believes that it

[11] United States Environmental Protection Agency (EPA). 2013. Determination of Attainment for the San Francisco Bay Area Nonattainment Area for the 2006 Fine Particle Standard; California; Determination Regarding Applicability of Clean Air Act Requirements. January 9. Website: https://www.govinfo.gov/content/pkg/FR-2013-01-09/pdf/2013-00170.pdf. Accessed May 18, 2021.

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

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

BAAQMD 2017 Clean Air Plan

In May 2017, the BAAQMD adopted the final Bay Area 2017 Clean Air Plan. The BAAQMD prepared the 2017 Clean Air Plan in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The goals of the 2017 Clean Air Plan are to reduce regional air pollutants and climate pollutants to improve the health of Bay Area residents for the next decades. The 2017 Clean Air Plan aims to lead the region into a post-carbon economy, continue progress toward attaining all State and federal air quality standards, and eliminate health risk disparities from air pollution exposure in Bay Area communities. The Plan includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision that forecasts what a clean air Bay Area will look like in the year 2050. The 2017 Clean Air Plan envisions a future whereby the year 2050:

- Buildings will be energy efficient—heated, cooled and powered by renewable energy.
- Transportation will be a combination of electric vehicles, both shared and privately owned, and autonomous public transit fleets, with a large share of trips by bicycling, walking, and transit.
- The Bay Area will be powered by clean, renewable electricity and will be a leading incubator and producer of clean energy technologies leading the world in the carbon-efficiency of our products.
- Bay Area residents will have developed a low-carbon lifestyle by driving electric vehicles, living in zero net energy homes, eating low-carbon foods, and purchasing goods and services with low-carbon content.
- Waste will be greatly reduced, waste products will be re-used or recycled, and all organic waste will be composted and put to productive use.

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

BAAQMD Regulations

Regulation 2, Rule 1 (Permits–General Requirements)

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

authorities to construct or permits to operate from the BAAQMD for new sources of air pollutants, as applicable.

Regulation 2, Rule 5 (New Source Review Permitting)

The BAAQMD regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (Regulation 2, Rule 5) permitting process.[12] Although emergency generators are intended for use only during periods of power outages, monthly testing of each generator is required; however, the BAAQMD limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of Tier 2 emission standards (before control measures). As part of the permitting process, the BAAQMD limits the excess cancer risk from any facility to no more than 10 per 1-million-population for any permits that are applied for within a 2-year period and would require any source that would result in an excess cancer risk greater than 1 per 1 million to install Best Available Control Technology (BACT) for Toxics.

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

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

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

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

Regulation 8, Rule 3 (Architectural Coatings)

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

Regulation 8, Rule 15 (Emulsified and Liquid Asphalts)

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

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

Under Regulation 9, Rule 8, the BAAQMD regulates the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. As such, any proposed stationary source equipment (e.g., backup

[12] Bay Area Air Quality Management District (BAAQMD). 2016. NSR [New Source Review] Permitting Guidance. Website: http://www.baaqmd.gov/permits/permitting-manuals/nsr-permitting-guidance. Accessed May 18, 2021.

generators, fire pumps) which would be greater than 50 horsepower would require a BAAQMD permit under Regulation 9, Rule 8 to operate.

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

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

Regulation 1, Rule 301 (Odorous Emissions)

The BAAQMD is responsible for investigating and controlling odor complaints in the Bay Area. The agency enforces odor control by helping the public to document a public nuisance. Upon receipt of a complaint, the BAAQMD sends an investigator to interview the complainant and to locate the odor source if possible. The BAAQMD typically brings a public nuisance court action when there are a substantial number of confirmed odor events within a 24-hour period. An odor source with five or more confirmed complaints per year, averaged over 3 years, is considered to have a substantial effect on receptors.

Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, Rule 301 is the nuisance provision that states that sources cannot emit air contaminants that cause nuisance to several people. Regulation 7 specifies limits for the discharge of odorous substances where the BAAQMD receives complaints from 10 or more complainants within a 90-day period. Among other things, Regulation 7 precludes discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with four parts of odor-free air and specifies maximum limits on the emission of certain odorous compounds.

Lastly, the BAAQMD enforces the Portable Equipment Registration Program (PERP) ATCM on behalf of the ARB. Under the PERP, owners or operators of portable engines and other types of equipment which meet the qualifications of the ATCM can register their equipment to operate throughout California. However, owners and operators of portable engines which meet the qualifications of this ATCM who do not register their equipment under the PERP must obtain individual permits from local air districts. Permits issued under the PERP must be honored by all air districts throughout California.

Plan Bay Area

On July 18, 2013, ABAG and the MTC approved the Plan Bay Area. The Plan Bay Area includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. The plan's transportation policies focus on maintaining the extensive existing transportation network and utilizing these systems more efficiently to handle density in Bay Area transportation cores.[13] Assumptions for land use development come from local and regional planning documents. Emission forecasts in the Bay Area Clean Air Plan rely on projections of VMT, population, employment, and land use projections made by local jurisdictions

[13] Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC). 2013. Plan Bay Area. Website: https://www.planbayarea.org/previous-plan. Accessed April 1, 2021.

during development of Plan Bay Area. The Plan Bay Area 2040 was adopted July 2017 and updates Plan Bay Area.

Plan Bay Area 2040, published by the MTC and ABAG, is a long-range integrated transportation and land use/housing strategy through 2040 for the Bay Area. Plan Bay Area 2040 functions as the sustainable communities' strategy mandated by Senate Bill (SB) 375. As a regional land use plan, Plan Bay Area 2040 aims to reduce per capita GHG emissions by promoting more compact, mixed use residential and commercial neighborhoods located near transit. Plan Bay Area 2040 is a limited and focused update that builds upon a growth pattern and strategies developed in the original Plan Bay Area (adopted by MTC in 2013) but with updated planning assumptions that incorporate key economic, demographic, and financial trends from the last 4 years.

Local

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address air quality and reduce the community's vulnerability to air pollution. The following objectives and policies from the City's General Plan are relevant to air quality and apply to the proposed project:

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design

requirements, the City shall balance energy-efficient design with good planning principles.

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e., businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

3.2.4 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts to air quality are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. On the subject of air quality, Appendix G states that, "[w]here 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." As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G and input from relevant air districts. The City has chosen to do so for this project.

Additional guidance on the significance of air quality impacts is found in CEQA Guidelines Section 15065, subdivision (a)(4), which provides that a lead agency shall find that a project may have a significant effect on the environment if "the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly." According to the California Supreme Court, this "mandatory finding of significance" applies to potential effects on public health from environmental impacts such as those associated with air pollutant emissions from projects. (*California Business Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 386-392.)

In light of the foregoing, the proposed project would have a significant effect related to air quality if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations (and thereby possibly cause substantial adverse effects on human beings, directly or indirectly); or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Significance Criteria

The preceding thresholds of significance are stated in general terms. It is therefore desirable to formulate additional, more precise thresholds based on guidance from the BAAQMD, as is encourage in Appendix G to the CEQA Guidelines. As explained earlier, BAAQMD's May 2017 CEQA Air Quality Guidelines were prepared to assist in evaluating air quality impacts of projects and plans proposed within the Bay Area. [14] The guidelines provide recommended procedures for evaluating potential air quality impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHGs. The analysis below was prepared using these BAAQMD CEQA Guidelines.

Regional Significance Criteria

Table 3.2-7 shows the BAAQMD's criteria for regional significance for project construction and operations.

Table 3.2-7: BAAQMD Regional (Mass Emissions) Air Pollutant Significance Thresholds

Pollutant	Construction Phase	Operational Phase	
	Average DailyEmissions (pounds/day)	Average DailyEmissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
PM_{10} and $PM_{2.5}$ Fugitive Dust	Best Management Practices	None	None

Notes:
ROG = reactive organic gas
NO_X = oxides of nitrogen
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
Source: Bay Area Air Quality Management District (BAAQMD) 2017. May. California Environmental Quality Act Air Quality Guidelines.

In developing the above significance thresholds, the BAAQMD considers the emission levels for which a project's individual emissions would be cumulatively considerable. If a project were to exceed the emission thresholds in Table 3.2-7, that project's emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality

[14] 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 March 17, 2021.

conditions.[15] Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with PM include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions thresholds shown in Table 3.2-7, it is speculative to determine how exceeding regional thresholds would affect the number of days the region is in nonattainment—as mass emissions are not linearly correlated with concentrations of emissions—or how many additional individuals in the Air Basin would be affected by the health effects cited above.

In *Sierra Club v. County of Fresno (Friant Ranch, LP)* (2018) 6 Cal.5th 502, 510, 517-522, the California Supreme Court held generally that an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." A possible example of such a connection would be to calculate a project's "impact on the days of nonattainment per year" (*Id*. at pp. 521). But the court recognized that there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies (*Id*. at pp. 520-521). Thus, the court acknowledged that another option for an agency preparing an EIR might be "to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences" (*Id*. at p. 522).

Here, the BAAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of emissions in the Air Basin. At present, the BAAQMD has not provided any methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO_X) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions. The City has therefore concluded that it is not feasible to predict how mass emissions of pollutants of regional concern from the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SFBAAB will be in nonattainment for regional pollutants.

Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the Ambient Air Quality Standards (AAQS). However, if a project within the BAAQMD exceeds the regional significance thresholds, the proposed project could

[15] Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. Accessed: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

contribute to an increase in health effects in the basin until the attainment standards are met in the Air Basin.

On the other hand, it is technically feasible to predict with reasonable accuracy the potential localized health consequences of localized pollutants such as TACs and $PM_{2.5}$. As discussed below, the consultants who prepared this section prepared a Health Risk Assessment (HRA) that addresses the potential for additional incidences of cancer resulting from both the construction-related emissions and the operational emissions of the proposed project.

Consistency with Air Quality Plan

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

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

A project would be determined to conflict with or obstruct implementation of an applicable air quality plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

Local CO Hotspots

Congested intersections have the potential to create elevated concentrations of CO, referred to as CO hotspots. The significance criteria for CO hotspots are based on the CAAQS for CO, which is 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average). However, with the turnover of older vehicles, the introduction of cleaner fuels, and implementation of control technology, the SFBAAB is in the attainment of the CAAQS and NAAQS, and CO concentrations in the SFBAAB have steadily declined. Because CO concentrations have improved, the BAAQMD does not require a CO hotspot analysis if all the following criteria are met:

- The project is consistent with an applicable congestion management program established by the County Congestion Management Agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans; and
- The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersection to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g.,

tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).[16]

Community Risk and Hazards

The BAAQMD's significance thresholds for local community risk and hazard impacts apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level.

- The proposed project would generate TACs and $PM_{2.5}$ during construction activities that could elevate concentrations of air pollutants at the nearby school and residential sensitive receptors. The thresholds for construction-related local community risk and hazard impacts are the same as for project operations. The BAAQMD has adopted screening tables for air toxics evaluation during construction.[17] Construction-related TAC and $PM_{2.5}$ impacts should be addressed on a case-by-case basis, considering each project's specific construction-related characteristics and proximity to off-site receptors, as applicable.[18]
- The proposed project involves the construction of new industrial warehouse facilities and would be a source of operational TACs and $PM_{2.5}$ from trucking activity. The BAAQMD thresholds related to siting new sources of TACs and $PM_{2.5}$ near existing or planned sensitive receptors are applicable.

Since the City of American Canyon does not have a qualified risk reduction plan, a site-specific analysis of TACs and $PM_{2.5}$ impacts on sensitive receptors was conducted. The thresholds identified below are applied to the proposed project's construction and operational phases.

Community Risk and Hazards: Project

Project-level emissions of TACs or $PM_{2.5}$ from individual sources that exceed any of the thresholds listed below are considered a potentially significant community health risk:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a significant cumulatively considerable contribution.
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) annual average $PM_{2.5}$ from a single source would be a significant cumulatively considerable contribution.

[16] 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 July 20, 2021.

[17] Bay Area Air Quality Management District (BAAQMD). 2010. Air Toxics NSR Program, Health Risk Screening Analysis Guidelines. Website: https://www.baaqmd.gov/~/media/Files/Engineering/Air%20Toxics%20Programs/hrsa_guidelines.ashx. Accessed July 20, 2021.

[18] 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 18, 2021.

Community Risk and Hazards: Cumulative

Cumulative sources represent the combined total risk values of each of the individual sources within the 1,000-foot evaluation zone. A project would have a cumulatively considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source or location of a receptor, plus the contribution from the proposed project, meets any of these conditions:

- Has excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard index (from all local sources) greater than 10.0.
- Exceeds 0.8 µg/m^3 annual average $PM_{2.5}$.

In February 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) adopted new HRA guidance that includes several efforts to be more protective of children's health. These updated procedures include age sensitivity factors to account for the higher sensitivity of infants and young children to cancer-causing chemicals, and age-specific breathing rates.[19]

Odors

The BAAQMD thresholds for odors are qualitative based on BAAQMD Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds. Odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health, or safety of any such persons or the public; or which causes, or has a natural tendency to cause, injury, or damage to business or property. Under BAAQMD Rule 1-301, the BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. Table 3.2-8 shows the screening distances for various land uses that are considered to have objectionable odors.[20]

Table 3.2-8: BAAQMD Odor Screening-level Distances Thresholds

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

[19] California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed May 18, 2021.

[20] 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 May 18, 2021.

Land Use/Type of Operation	Project Screening Distance
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
Metal Smelting Plants	2 miles
Source: Bay Area Air Quality Management District (BAAQMD) 2017.	

Approach to the Analysis

Emission factors represent the emission rate of a pollutant over a given time or activity; for example, grams of NO_X per VMT or grams of NO_X per horsepower-hour of equipment operation. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factors (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. Activity levels measure how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or VMT per day. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was developed in collaboration with the South Coast Air Quality Management District and other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from various land uses.

The modeling follows BAAQMD guidance where applicable from its CEQA Air Quality Guidelines. The following criteria air pollutants and precursors are assessed in this analysis:

- Reactive organic gases
- Nitrogen oxides (NO_X)
- Carbon monoxide (CO)
- Particulate matter equal to or less than 10 microns in diameter (PM_{10})
- Particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$)

Note that the proposed project would emit ozone precursors ROG and NO_X. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reactions of the ozone precursors.

At the time of this analysis, the construction of Phase 1 of the proposed project was anticipated to begin in early 2022 and be completed 10 months later. Construction of Phase 2 of the proposed project was expected to begin immediately following the completion of Phase 1 construction and be completed 10 months later. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements. In general, this analysis also included estimated project trip generation and trip length provided by W-Trans (Appendix H). As the proposed project is a speculative warehouse development which could accommodate cold storage and accompanying TRUs, this analysis considers two project scenarios: a cold warehouse project scenario and a dry warehouse project scenario. Where appropriate, both project scenarios are presented herein to determine project impacts.

Construction-related Criteria Pollutants

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from both on-site and off-site activities. On-site emissions consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and the application of architectural coatings would release ROG emissions. Off-site emissions result from motor vehicle exhaust from delivery vehicles, worker traffic and road dust (PM_{10} and $PM_{2.5}$).

Equipment Tiers and Emission Factors

Equipment tiers refer to a generation of emission standards established by the EPA and ARB that apply to diesel engines in off-road equipment. The “tier” of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the greater the tier it is likely to have. Excluding engines greater than 750 horsepower, Tier 1 engines were manufactured generally between 1996 and 2003. Tier 2 engines were manufactured between 2001 and 2007. Tier 3 engines were manufactured between 2006 and 2011. Tier 4 engines are the newest and some incorporate hybrid electric technology; they have been manufactured since 2007.

Construction emissions are generally calculated as the product of an activity factor and an emission factor. The activity factor for construction equipment is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or the amount of fuel consumed in a given amount of time. The emission factor relates the process activity to the amount of pollutant emitted. Examples of emission factors include grams of emissions per miles traveled and grams of emissions per horsepower-hour. The operation of a piece of equipment is tempered by its load factor, which is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

Operation-related Criteria Pollutants

The operational-phase emissions are based on the development of the proposed industrial park. The modeling accounts for the average daily vehicle and truck trips and VMT, energy usage, water demand, and wastewater and solid waste generation. For purposes of this analysis, hours of operation for the proposed project are 24 hours per day, 7 days per week.

Transportation

On-road transportation sources are based on passenger vehicle and truck trip generation rates and VMT provided in the Traffic Impact Analysis (TIS) prepared by W-Trans for the proposed project (see Appendix H). According to the VMT information provided therein, the proposed project would result in an average employee daily VMT of 16.24 miles. As this VMT would represent all travel to and from the project site for employees, an average of 8.12 miles per vehicle trip was utilized in this analysis to estimate associated emissions from employee passenger vehicle activity. However, as provided in the TIS, the proposed project would also generate truck traffic for deliveries and shipments. As indicated by the project applicant, the most probable port of origin for freight deliveries and shipments would be the Port of Oakland, approximately 32.8 miles from the project site. Therefore, truck travel distances utilized in this analysis were assumed to be 32.8 miles per trip.

Furthermore, the proposed project would include locomotive operations beginning with operation of Phase 1. The quantity and frequency of rail shipments to the project site are currently unknown; therefore, various assumptions are utilized in this analysis to characterize future operations. For instance, according to the United States Bureau of Transportation Statistics, the average weight of a loaded railcar ranges from 63 to 67 tons;[21] therefore, for the purposes of this analysis, a loaded railcar being shipped to the proposed project is assumed to weigh 65 tons on average. Assuming an average travel distance of 50 miles and an average loaded railcar weight of 65 tons,[22] this would represent nearly two loaded, 20-railcar locomotive deliveries per week. Please refer to the locomotive emissions estimations contained in Appendix B for more details.

CalEEMod, Version 2020.4.0 was used to quantify passenger vehicle and truck emissions using vehicle emission rates based on vehicle emissions data obtained from the ARB EMFAC2017 Version 1.0.2 web database and adjusted based on methodology provided in Appendix B of the CalEEMod User's Guide.[23] The passenger vehicle trips were assumed to be distributed among the light-duty auto (LDA), light-duty truck 1 (LDT1), light-duty truck 2 (LDT2), and medium-duty vehicle (MDV) EMFAC2007 vehicle categories, proportional to that respective vehicle category's share of those four-passenger vehicle categories within the CalEEMod for Napa County.

[21] United States Bureau of Transportation Statistics. 2012. Railcar Weights. Website: https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2003/chapter_02/railcar_weights#:~:text=The%20average%20weight%20of%20a,trends%20among%20selected%20freight%20commodities. Accessed July 29, 2021.

[22] United States Department of Transportation (USDOT), Bureau of Transportation Statistics. 2012. Railcar Weights. Website: https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2003/chapter_02/railcar_weights#:~:text=The%20average%20weight%20of%20a,trends%20among%20selected%20freight%20commodities. Accessed August 2, 2021.

[23] California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2020.4.0 Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

Truck and TRU emissions were calculated utilizing the ARB's EMFAC2017 Version 1.0.3 and OFFROAD web databases, respectively, and adjusted based on methodology provided in Appendix B. Please refer to the fleet mix adjustment calculations contained in Appendix B for more details.

Other Operational Emissions

Solid Waste Disposal. Indirect emissions from waste generation are based on the CalEEMod default solid waste generation rates, which are based on data from the California Department of Resources, Recycling, and Recovery (CalRecycle).

Water/Wastewater. GHG emissions from this sector are associated with the embodied energy used to supply treat and distribute water, and then treat wastewater and fugitive GHG emissions from wastewater treatment. Indoor water consumption is based on CalEEMod default indoor water use rates.

Area Sources. Area and stationary sources are based on the CalEEMod defaults for use of consumer products and cleaning supplies.

Energy. Emissions from this sector are principally from use of natural gas for space and water heating at the proposed buildings.

Stationary Sources. Stationary sources are based on the anticipated stationary source equipment included in the proposed project. Given the type and size of the proposed project, the project applicant anticipates the use of a backup diesel generator and diesel-fueled fire pump for each of the proposed buildings; however, the exact specifications for this equipment is unknown at the time of this analysis. To account for potential operational emissions generated from the non-emergency use of this equipment, the proposed project was assumed to include three backup diesel generators and three diesel-fueled fire pumps, each assumed to be rated at 50 horsepower and operate for a four-hour maintenance period one day per month, totaling an estimated 48 hours of operation per year.

Construction- and Operation-related Toxic Air Contaminants

TACs are air pollutants in minuscule amounts in the air that could increase the chances of experiencing health problems if a person receives exposure to them. Exposures to TAC emissions can have both chronic long-term (over a year or longer) and acute short-term (over a period of hours) health impacts. Construction-period TAC emissions could contribute to increased health risks to nearby residents or sensitive receptors.

This analysis assesses the potential health impacts to surrounding sensitive receptors resulting from TAC emissions during project construction. The TACs of greatest concern are those that cause serious health problems or affect many people. Health problems can include cancer, respiratory irritation, nervous system problems, and birth defects. Some health problems occur soon after a person inhales TACs. These immediate effects may be minor, such as watery eyes; or they may be serious, such as life-threatening lung damage. Other health problems may not appear until many months or years after a person's first exposure to the TAC. Cancer is one example of a delayed health problem.

Fine particle pollution can be emitted directly or formed secondarily in the atmosphere. $PM_{2.5}$ health impacts are important because their size can be deposited deep in the lungs, causing respiratory

effects. For purposes of this analysis, exhaust emissions of DPM are represented as exhaust emissions of $PM_{2.5}$. Studies indicate that DPM poses the greatest health risk among airborne TACs. A 10-year ARB research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic long-term health risk. DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel-fueled internal combustion engines emit DPM, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. The CalEEMod emissions model has been used to estimate DPM emissions during construction and operation of the proposed project.

Odors

The impact analysis qualitatively evaluates the types of land uses proposed to evaluate whether major sources of anticipated odors would be present and, if so, whether those sources would likely generate objectionable odors. According to the BAAQMD's CEQA Air Quality Guidelines, a project that involves the siting of a new odor source would consider the screening-level distances and the complaint history of the odor sources, described below. Projects that would site a new odor source farther than the screening-level distances provided in Table 3.2-8 would not likely result in a significant odor impact.

3.2.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Consistency with Air Quality Management Plan

Impact AIR-1:	**The proposed project would conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

The BAAQMD is responsible for reducing emissions from area, stationary, and mobile sources in the SFBAAB to achieve National and California AAQS. The BAAQMD 2017 Clean Air Plan is a regional and multiagency effort to reduce air pollution in the Air Basin. A consistency determination with the Air Quality Management Plan (AQMP) plays an important role in local agency project review by linking local planning and individual projects to the 2017 Clean Air Plan. It fulfills the CEQA goal of informing decision-makers of the proposed project's environmental effects under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the 2017 Clean Air Plan.

The BAAQMD compiles the regional emissions inventory for the SFBAAB. In part, the regional population, housing, and employment projections developed by the ABAG are based on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the 2017 Clean Air Plan. These demographic trends are incorporated into Plan Bay Area, compiled by ABAG and the MTC, to determine priority transportation projects and VMT in the Bay Area. Projects consistent with the local general plan are considered consistent with the regional air

quality plan. Large projects that exceed regional employment, population, and housing planning projections have the potential to be inconsistent with the regional inventory compiled as part of the 2017 Clean Air Plan.

The proposed project would build a 2.4-million-square-foot logistics center on approximately 161 acres of the project site. The remaining approximately 47 acres would be preserved as open space. The 94.7-acre area east of what will be Devlin Road would support two high-cube warehouse buildings totaling 1,069,904 square feet (Phase 1). Phase 2, the 113.1-acre area west of Devlin Road, would develop the remaining 1.3 million square feet of high-cube warehouse. The project site is designated "Industrial" by the City of American Canyon General Plan and zoned "General Industrial." As previously described, demographics trends such as employment and population growth were estimated in ABAG's Plan Bay Area 2040 based on local general plan land use patterns, which the BAAQMD utilized in part to inform the emissions inventory and projections contained in the 2017 Clean Air Plan. As a result, the ABAG regional population, housing, and employment estimates for this project site would be reasonably accounted for because the proposed project is consistent with these General Plan land use designations. Thus, the proposed project would generally be consistent with the underlying general plan land use designation and would not have the potential to substantially affect housing, employment, and population projections in the region that are the basis of the 2017 Clean Air Plan projections.

Table 3.2-9 identifies the control measures in the 2017 Clean Air Plan required by BAAQMD to reduce emissions for a wide range of stationary and mobile sources and the project's consistency analysis with these control measures. As shown in Table 3.2-9, the proposed project would not conflict with the control measures of the 2017 Clean Air Plan.

Table 3.2-9: Consistency With 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Consistency Analysis
Stationary Source Control Measure	SS 1–Fluid Catalytic Cracking in Refineries SS 2–Equipment Leaks SS 3–Cooling Towers SS 4–Refinery Flares SS 5–Sulfur Recovery Units SS 6–Refinery Fuel Gas SS 7–Sulfuric Acid Plants SS 8–Sulfur Dioxide from Coke Calcining SS 9–Enhanced NSR Enforcement for Changes in Crude Slate SS 10–Petroleum Refining Emissions Tracking SS 11–Petroleum Refining Facility-Wide Emission Limits SS 12–Petroleum Refining Climate Impacts Limit SS 13–Oil and Gas Production, Processing and Storage SS 14–Methane from Capped Wells SS 15–Natural Gas Processing and Distribution	**Consistent**. Stationary sources are regulated directly by the BAAQMD, which routinely adopts/revises rules or regulations to implement the Stationary Source (SS) control measures to reduce stationary source emissions. Therefore, any new stationary sources associated with the proposed project would be required to comply with BAAQMD's regulations. Based on the proposed warehousing use for the project site, it is not anticipated that the proposed project would result in any new major stationary source emissions. Additionally, in the event stationary equipment is installed on-site, it is anticipated that the equipment would be small-quantity emitters and would require review by BAAQMD for

Type	Measure Number/Title	Consistency Analysis
	SS 16–Basin-Wide Methane Strategy SS 17–GHG BACT Threshold SS 18–Basin-Wide Combustion Strategy SS 19–Portland Cement SS 20–Air Toxics Risk Cap and Reduction from Existing Facilities SS 21–New Source Review for Toxics SS 22–Stationary Gas Turbines SS 23–Biogas Flares SS 24–Sulfur Content Limits of Liquid Fuels SS 25–Coatings, Solvents, Lubricants, Sealants and Adhesives SS 26–Surface Prep and Cleaning Solvent SS 27–Digital Printing SS 28–LPG, Propane, Butane SS 29–Asphaltic Concrete SS 30–Residential Fan Type Furnaces SS 31–General Particulate Matter Emission Limitation SS 32–Emergency Backup Generators SS 33–Commercial Cooking Equipment SS 34–Wood Smoke SS 35–PM from Bulk Material Storage, Handling and Transport, Including Coke and Coal SS 36–PM from Trackout SS 37–PM from Asphalt Operations SS 38–Fugitive Dust SS 39–Enhanced Air Quality Monitoring SS 40–Odors	permitted sources of air which would ensure consistency with the 2017 Clean Air Plan.
Transportation Control Measures	TR 1–Clean Air Teleworking Initiative TR 2–Trip Reduction Programs TR 3–Local and Regional Bus Service TR 4–Local and Regional Rail Service TR 5–Transit Efficiency and Use TR 6–Freeway and Arterial Operations TR 7–Safe Routes to Schools and Safe Routes to Transit TR 8–Ridesharing, Last-Mile Connection TR 9–Bicycle and Pedestrian Access and Facilities TR 10–Land Use Strategies TR 11–Value Pricing TR 12–Smart Driving TR 13–Parking Policies TR 14–Cars and Light Trucks TR 15–Public Outreach and Education TR 16–Indirect Source Review TR 17–Planes TR 18–Goods Movement TR 19–Medium and Heavy-Duty Trucks TR 20–Ocean Going Vessels	**Consistent**. Transportation (TR) control measures are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, and traffic congestion to reduce motor vehicle emissions. Although most of the TR control measures are implemented at the regional level—that is, by MTC or California Department of Transportation (Caltrans)—the 2017 Clean Air Plan relies on local communities to assist with the implementation of some measures. Electrical conduits would be provided in the parking lot to accommodate future electric vehicle parking spaces. The proposed project would also be subject to the Bay Area's Commuter Benefits Program, which requires all employers in BAAQMD's jurisdiction that have 50 or more full-time

Type	Measure Number/Title	Consistency Analysis
	TR 21–Commercial Harbor Craft TR 22–Construction, Freight and Farming Equipment TR 23–Lawn and Garden Equipment	employees to offer commuter benefits to their employees.
Energy and Climate Control Measures	EN 1–Decarbonize Electricity Production EN 2–Renewable Energy Decrease Electricity Demand	**Consistent**. The Energy and Climate (EN) control measures are intended to reduce energy use as a means of reducing adverse air quality emissions. Additionally, the proposed buildings would comply with 2019 Building Energy Efficiency Standards' solar requirements and would be constructed to support future roof-mounted solar systems. Moreover, compliance with the 2019 Building Energy Efficiency Standards would improve energy efficiency by an overall 30 percent compared to the 2016 Building Energy Efficiency Standards.[24]
Buildings Control Measures	BL 1–Green Buildings BL 2–Decarbonize Buildings BL 3–Market-Based Solutions BL 4–Urban Heat Island Mitigation	**Consistent**. The Buildings (BL) control measures focus on working with local governments to adopt the best GHG emissions control practices and policies. As discussed above for the EN control measures, the proposed buildings would comply with 2019 Building Energy Efficiency Standards—i.e., constructed to support a roof-mounted solar system and achieving greater energy efficiency compared to the 2016 Building Energy Efficiency Standards.
Agriculture ControlMeasures	AG 1–Agricultural Guidance and Leadership AG 2–Dairy Digesters AG 3–Enteric Fermentation AG 4–Livestock Waste	**Not Applicable**. Agricultural (AG) practices in the Bay Area account for a small portion, roughly 1.5 percent, of the Bay Area GHG emissions inventory. The GHGs from agriculture include methane, nitrous oxide, and carbon dioxide. The proposed project would not involve any agricultural activities or operations.
Natural and WorkingLands Control Measures	NW 1–Carbon Sequestration in Rangelands NW 2–Urban Tree Planting NW 3–Carbon Sequestration in Wetlands	**Consistent**. The control measures for the Natural and Working Lands (NW) sector focus on increasing carbon sequestration on rangelands and wetlands. The proposed project would include the planting of various ornamental and shade trees throughout

[24] California Energy Commission (CEC). 2018. 2019 Building Energy Efficiency Standards Frequently Asked Questions. Website: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed July 29, 2021.

Type	Measure Number/Title	Consistency Analysis
		the project site. Additionally, the proposed project would include an approximately 45-acre Wetland Preserve to include existing wetlands as well as established/created wetlands intended to offset wetland impacts of buildout development of the project site. These actions would support the State's working lands and would therefore make the proposed project consistent with this measure.
Waste Management Control Measures	WA 1–Landfills WA 2–Composting and Anaerobic Digesters WA 3–Green Waste Diversion WA 4–Recycling and Waste Reduction	**Consistent**. The Waste Management (WA) control measures include strategies to increase waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with Assembly Bill (AB) 341, which requires mandatory commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week. Additionally, the proposed project would be required to reduce construction waste by 75 percent and use 30 percent recycled content during the construction of the proposed facility. Therefore, the proposed project would not conflict with these WA control measures.
Water Control Measures	WR 1–Limit GHGs from publicly owned treatment works (POTWs) WR 2–Support Water Conservation	**Consistent.** The 2017 Clean Air Plan includes measures to reduce water use. The proposed project would include water efficiency measures required under CALGreen. In addition, the proposed project would include water-efficient indoor fixtures consistent with the requirements of CALGreen and water-efficient landscaping outdoors.
Super GHG ControlMeasures	SL 1–Short-Lived Climate Pollutants SL 2–Guidance for Local Planners SL 3–GHG Monitoring and Emissions Measurements Network	**Consistent**. Super-GHGs include methane, black carbon, and fluorinated gases. These compounds are sometimes referred to as short-lived climate pollutants because their lifetime in the atmosphere is generally fairly short. Measures to reduce super-GHGs are addressed on a sector-by-sector basis in the 2017 Clean Air Plan. As discussed under Impact AIR-2, the proposed project would be required to implement Mitigation Measure (MM) AIR-2d, which

Type	Measure Number/Title	Consistency Analysis
		would require the use of a trucking fleet utilizing model year 2010 trucks or newer. This requirement would contribute to reducing black carbon. Furthermore, the proposed project would comply with AB 341, which mandates commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week, which could contribute to reducing methane by diverting waste from landfills.
Further Study ControlMeasures	FSM SS 1–Internal Combustion Engines FSM SS 2–Boilers, Steam Generator and Process Heaters FSM SS 3–GHG Reductions from Non Cap-and-Trade Sources FSM SS 4–Methane Exemptions from Wastewater Regulation FSM SS 5–Controlling start-up, shutdown, maintenance, and malfunction (SSMM) Emissions FSM SS 6–Carbon Pollution Fee FSM SS 7–Vanishing Oils and Rust Inhibitors FSM SS 8–Dryers, Ovens and Kilns FSM SS 9–Omnibus Rulemaking to Achieve Continuous Improvement FSM BL 1–Space Heating FSM AG 1–Wineries	**Consistent**. The majority of the Further Study Control Measures (FSM) apply to sources regulated directly by the BAAQMD. Because the BAAQMD is the implementing agency, any new sources of stationary and area sources in the project site would be required to comply with these additional study control measures in the 2017 Clean Air Plan.
Notes: AG = Agricultural BL = Buildings EN = Energy and Climate FSM = Further Study Measures NW = Natural and Working Lands SL = Super GHG (Short-Lived) SS = Stationary Sources TR = Transportation WA = Waste Management WR = Water Control Measures Source: Bay Area Air Quality Management District (BAAQMD). 2017, April 19. Final 2017 Clean Air Plan, Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed July 27, 2021.		

As shown in Table 3.2-9, the proposed project would not conflict with the clean air measures contained in the Clean Air Plan after mitigation. Nonetheless, the BAAQMD's CEQA Air Quality Guidelines further recommend determining a project's consistency with the 2017 Clean Air Plan, in part, by determining a project's consistency with the significance thresholds presented in Table

3.2-7.[25] As discussed under Impact AIR-2, the proposed project would generate emissions which exceed the BAAQMD's significance thresholds after the implementation of applicable and feasible mitigation and would result in a significant and unavoidable impact. Because the proposed project would exceed these thresholds after implementation of feasible mitigation, the proposed project would be considered by the BAAQMD to be a substantial emitter of criteria air pollutants. This impact would be significant and unavoidable.

As discussed under Impact AIR-2, the proposed project would generate criteria pollutant and ozone precursor emissions during construction and operation. The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, Mitigation Measure (MM) AIR-2a would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs.

As discussed under Impact AIR-2, unmitigated project construction ROG emissions would exceed BAAQMD significance thresholds. Specifically, architectural coating activities during project construction would principally contribute to the exceedance. As such, MM AIR-2b would require project construction to utilize low-VOC (i.e., ROG) architectural coating products containing no greater than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during architectural coating activities. Implementation of MM AIR-2b would result in reducing ROG emissions from 68 average pounds per day to 33 average pounds per day, which is below the BAAQMD significance threshold of 54 pounds per day for ROG emissions.

As discussed under Impact AIR-2, unmitigated project operation would result in ROG and NO_X emissions which exceed BAAQMD significance thresholds. ROG emissions generated during project operation would principally be generated by consumer products, which cannot be sufficiently controlled by the proposed project due to the possible use of cleaning products, hairsprays, and other personal care products by employees. As ROG emissions generated under the control of the proposed project during project operation would principally be generated by the periodic reapplication of architectural coatings, MM AIR-2c would be required to ensure the use of low-VOC (i.e., ROG) architectural coating products that contain no more than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during project operation. Additionally, as NO_X emissions generated during project operation would principally be generated by the operation of the trucking fleet, irrespective of whether the fleet would accommodate the use of TRUs, MM AIR-2d would be required to ensure the trucking fleet accessing the project site would be comprised of vehicles no older than model year 2014 to reduce tailpipe NO_X emissions.

[25] 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 December 15, 2021.

Under a dry storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 13 tons per year and 70 average pounds per day to approximately 12 tons per year and 64 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 16 tons per year and 90 average pounds per day to approximately 15 tons per year and 85 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year and 54 average pounds per day.

Under a dry storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 40 tons per year and 217 average pounds per day to approximately 35 tons per year and 192 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 71 tons per year and 388 average pounds per day to approximately 66 tons per year and 362 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day.

Consequently, implementation of MM AIR-2a and MM AIR-2b would sufficiently reduce project construction emissions to less than significant levels; however, implementation of MM AIR-2c and MM AIR-2d would not be sufficient to reduce project operation emissions to less than significant levels. Therefore, the proposed project would generate emissions which exceed the BAAQMD's significance thresholds after the implementation of applicable and feasible mitigation and would result in a significant and unavoidable impact. As previously discussed, the BAAQMD's CEQA Air Quality Guidelines recommend determining a project's consistency with the 2017 Clean Air Plan, in part, by determining a project's consistency with the BAAQMD significance thresholds. Because the proposed project would exceed significance thresholds after mitigation, resulting in a significant and unavoidable impact, the proposed project would be inconsistent with the 2017 Clean Air Plan. Therefore, this impact would be significant unavoidable impact after the incorporation of identified mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measures MM AIR-2a**,** MM AIR-2b**,** MM AIR-2c**,** MM AIR-2d.

Level of Significance After Mitigation

Significant unavoidable impact.

Cumulative Criteria Pollutant Emissions Impacts

Impact AIR-2: The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the Air Basin, and this regional impact is a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when evaluated in combination with past, present, and future development projects.

Potential localized and regional impacts would result in exceedances of State or federal standards for NO_X, particulate matter (PM_{10} and $PM_{2.5}$), or CO. NO_X emissions are of concern because of potential health impacts from exposure to NO_X emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and potential health effects.

ROG emissions are also important because of their participation in the formation of ground-level ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The significance thresholds represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Construction and operational emissions are discussed separately below.

Construction

During construction, fugitive dust would be generated from site grading and other earthmoving activities. The majority of this fugitive dust would remain localized and deposited near the project site; however, fugitive dust's potential impacts exist unless control measures are implemented to reduce this source's emissions. Exhaust emissions would also be generated from the operation of the off-road construction equipment and on-road construction vehicles.

Construction Fugitive Dust

The BAAQMD does not recommend a numerical threshold for fugitive dust PM emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented, referred to as BMPs. If all appropriate emissions control measures are implemented for a project as recommended by the BAAQMD, then fugitive dust emissions during construction are not considered significant. Therefore, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-2a would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs. With the incorporation of this mitigation, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant for fugitive dust.

Construction Air Pollutant Emissions: ROG, NO_X, PM_{10}, $PM_{2.5}$

CalEEMod, Version 2020.4.0, was used to estimate the proposed project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from various land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this impact.

At the time of this analysis, the construction of Phase 1 of the proposed project was anticipated to begin in early 2022 and be completed 10 months later. Construction of Phase 2 of the proposed project was expected to begin immediately following the completion of Phase 1 construction and be completed 10 months later. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements.

Construction activities such as grading, excavation, and travel on unpaved surfaces would generate dust and lead to elevated concentrations of PM_{10} and $PM_{2.5}$. According to the project site plans dated November 11, 2020, an estimated 5,400 cubic yards are anticipated to be imported during Phase 1 grading activities, and, according to telephone correspondence with the project applicant, Phase 2 is assumed to balance grading activities on-site. As the BAAQMD dust control measures would be required to ensure fugitive dust impacts are less than significant, the emission estimates shown

below account for the implementation of MM AIR-2a. The operation of construction equipment results in exhaust emissions, which include ROG and NO_X. Table 3.2-10 presents construction-period emissions that would result from the development of the proposed project.

Table 3.2-10: Unmitigated Construction Emissions

Construction Activity	Criteria Pollutant Emissions (Tons)			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Project Phase 1				
Site Preparation (2022)	<0.01	0.02	<0.01	<0.01
Grading (2022)	0.03	0.39	0.01	0.01
Building Construction (2022)	0.54	4.00	0.10	0.09
Paving (2022)	0.05	0.06	<0.01	<0.01
Architectural Coating (2022)	5.90	0.01	<0.01	<0.01
Project Phase 2				
Site Preparation (2022)	<0.01	0.02	<0.01	<0.01
Grading (2022)	0.03	0.33	0.01	0.01
Building Construction (2022)	0.10	0.70	0.02	0.01
Building Construction (2023)	0.47	3.42	0.07	0.06
Paving (2023)	0.06	0.06	<0.01	<0.01
Architectural Coating (2023)	7.32	0.01	<0.01	<0.01
Total Construction Emissions (Tons)	**14.51**	**9.03**	**0.22**	**0.21**
Average Daily Emissions				
Total Construction Emissions (Pounds)	29,029	18,065	437	411
Average Daily Construction Emissions (Pounds/Day)	**68**	**42**	**1**	**1**
BAAQMD Significance Thresholds	54	54	82	54
Significant Impact?	**Yes**	**No**	**No**	**No**

Notes:
This analysis relies on a 427-day construction schedule, consistent with the construction schedule and modeling results contained in Appendix B.
ROG = reactive organic gases NOx = nitrogen oxides
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
BAAQMD = Bay Area Air Quality Management District
Source: Appendix B.

As shown in Table 3.2-10, ROG emissions generated mainly during architectural coating activities during project construction would exceed BAAQMD significance thresholds, requiring the implementation of MM AIR-2b, which would require the use of low-VOC (i.e., ROG) architectural coating products during project construction. Table 3.2-11 displays emissions generated during

project construction incorporating the implementation of MM AIR-2b. As shown therein, MM AIR-2b would reduce ROG emissions to below the applicable BAAQMD significance thresholds during project construction by implementing the use of architectural coating products that contain no greater than 50 grams of VOC (i.e., ROG) per liter of product. As a result, MM AIR-2b would result in reducing ROG emissions from 68 average pounds per day to 33 average pounds per day, which is below the BAAQMD significance threshold of 54 pounds per day for ROG emissions during project construction. Therefore, project construction emissions would be less than significant with the implementation of MMs AIR-2a and AIR-2b.

Table 3.2-11: Mitigated Construction Emissions

Construction Activity	Criteria Pollutant Emissions (Tons)			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Project Phase 1				
Site Preparation (2022)	<0.01	0.02	<0.01	<0.01
Grading (2022)	0.03	0.39	0.01	0.01
Building Construction (2022)	0.54	4.00	0.10	0.09
Paving (2022)	0.05	0.06	<0.01	<0.01
Architectural Coating (2022)	2.59	0.01	<0.01	<0.01
Project Phase 2				
Site Preparation (2022)	<0.01	0.02	<0.01	<0.01
Grading (2022)	0.03	0.33	0.01	0.01
Building Construction (2022)	0.10	0.70	0.02	0.01
Building Construction (2023)	0.47	3.42	0.07	0.06
Paving (2023)	0.06	0.06	<0.01	<0.01
Architectural Coating (2023)	3.22	0.01	<0.01	<0.01
Total Construction Emissions (Tons)	**7.09**	**9.03**	**0.22**	**0.21**
Average Daily Emissions				
Total Construction Emissions (Pounds)	14,190	18,065	437	411
Average Daily Construction Emissions (Pounds/Day)	**33**	**42**	**1**	**1**
BAAQMD Significance Thresholds	54	54	82	54
Significant Impact?	**No**	**No**	**No**	**No**

Notes:
This analysis relies on a 427-day construction schedule, consistent with the construction schedule and modeling results contained in Appendix B.
ROG = reactive organic gases NO_X = nitrogen oxides
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
BAAQMD = Bay Area Air Quality Management District
Source: Appendix B.

Operation

Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, $PM_{2.5}$

Operational emissions would include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources include emissions from the combustion of natural gas for water heaters and other heat sources. Mobile sources include exhaust and road dust emissions from the automobiles that would travel to and from the project site. Mobile sources also include exhaust from trailer-mounted TRUs which would accompany any freight truck carrying refrigerated goods. Stationary sources include emissions from stationary source equipment, such as backup generators, that would require a permit issued by the BAAQMD. Pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Project operations were analyzed at full buildout immediately following the completion of construction for Phase 2 in August 2023 as a conservative estimate of operational emissions beginning in the earliest year of full operation. According to the Traffic Impact Study (TIS) prepared for the proposed project,[26] during full operation, the proposed project is expected to generate an estimated 528 daily truck trips and 2,832 daily passenger vehicle trips. According to the site plan set for the proposed project, dated November 11, 2020, Phase 1 of the proposed project would construct a warehouse that will connect to the existing railroad bordering the eastern boundary of the project site. Because of the lack of information regarding the potential future tenants, the proposed warehouse space is analyzed for a cold storage scenario and a dry storage scenario.

The cold storage project scenario would also include the operation of TRUs. In the absence of specific project information, all TRUs analyzed herein utilize weighted averages for emission factors retrieved from the ARB's OFFROAD2017 database for in-state truck TRUs, in-state van TRUs, in-state gen-set TRUs, in-state trailer TRUs, out-of-state gen-set TRUs, out-of-state trailer TRUs, and locomotive TRUs, all utilizing aggregate horsepower bins. These vehicle categories were selected as they encompass all possible TRU emission factors contained in the ARB's OFFROAD2017 database. As each truck is assumed to be accompanied by a TRU under the cold storage scenario and each of the 528 truck trips is one-way, this analysis assumes a truck and TRU population of 266. Each TRU is assumed to spend an average of four hours running on-site for unloading and loading purposes,[27] and an average of two hours off-site traveling to and from the Port of Oakland—the closest major freight origin.

Furthermore, in the absence of more specific information, the locomotive emission estimates contained herein assume a monthly average of 500,000 ton-miles of product and material locomotive deliveries. Assuming an average travel distance of 50 miles and an average loaded railcar weight of 65 tons,[28] this would represent nearly two loaded, 20-railcar locomotive deliveries per week.

[26] W-Trans. 2021. Traffic Impact Study for the Giovannoni Logistics Center. March 11.

[27] California Air Resources Board (ARB). 2021. Appendix I Health Analyses: Transport Refrigeration Units. Website: https://ww3.arb.ca.gov/board/rulemaking/tru2021/appi.pdf. Accessed August 19, 2021.

[28] United States Department of Transportation (USDOT). Bureau of Transportation Statistics. 2012. Railcar Weights. Website: https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2003/chapter_02/railcar_weights#:~:text=The%20average%20weight%20of%20a,trends%20among%20selected%20freight%20commodities. Accessed August 2, 2021.

Operational emission estimates for the proposed project are contained in Table 3.2-12. For detailed assumptions used to estimate emissions, see Appendix B.

Table 3.2-12: Unmitigated Operational Emissions

Emissions Source	ROG	NO_X	PM_{10} Total	$PM_{2.5}$ Total
	Tons per Year			
Dry Storage Project Scenario				
Area	10.93	<0.01	<0.01	<0.01
Energy	0.04	0.40	0.03	0.03
Mobile–Passenger Vehicles	0.83	0.90	3.07	0.83
Mobile–Trucks	0.92	36.51	1.17	0.59
Mobile–Locomotives	ND	1.68	0.04	0.04
Mobile–TRUs	–	–	–	–
Stationary	0.01	0.04	<0.01	<0.01
Total (tons/year)	*12.74*	*39.54*	*4.32*	*1.49*
Significance Threshold (Tons/Year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Total Average (pounds/day)	*70*	*217*	*24*	*8*
Significance Threshold (Tons/Year)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Cold Storage Project Scenario				
Area	10.93	<0.01	<0.01	<0.01
Energy	0.05	0.44	0.03	0.03
Mobile–Passenger Vehicles	0.83	0.90	3.07	0.83
Mobile–Trucks	0.92	36.51	1.17	0.59
Mobile–Locomotives	ND	1.68	0.04	0.04
Mobile–TRUs	3.71	31.15	0.43	0.40
Stationary	0.01	0.04	<0.01	<0.01
Total (tons/year)	*16.46*	*70.73*	*4.76*	*1.89*
Significance Threshold (Tons/Year)	**10**	**10**	**15**	**10**

Emissions Source	ROG	NO_X	PM_{10} Total	$PM_{2.5}$ Total
	Tons per Year			
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Total Average (pounds/day)	*90*	*388*	*26*	*10*
Significance Threshold (Tons/Year)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**

Notes:
[1] Totals may not add up due to rounding. Calculations use unrounded results. 365 working days per year is assumed to estimate average daily emission rates.
lb. = 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
ND = No Data
Source: CalEEMod Output (see Appendix B).

Table 3.2-12 indicates that the proposed project would result in operational-related criteria air pollutants or ozone precursors which would exceed the BAAQMD's thresholds of significance, specifically with respect to ROG and NO_X emissions. As area sources would generate the majority of operational ROG emissions, MM AIR-2c would be required to ensure the use of low-VOC architectural coatings for any reapplication of paints and coatings and the use of electric landscaping equipment, including chainsaws, lawnmowers, and leaf blowers during project operation. In addition, as the trucking fleet would generate the majority of operational NO_X emissions, MM AIR-2d would be required to ensure that a more fuel-efficient, lower-emission trucking fleet—one which demonstrates a model year 2014 or newer for all heavy-duty trucks upon first implementation—is utilized during project operation. Model year 2014 was selected because it is the first homogenous model year for a trucking fleet in Napa County to demonstrate a reduction in NO_X emissions when compared with unmitigated emission estimates. This is considered a feasible trucking mitigation measure as the ARB's Truck and Bus Regulation[29] would otherwise require trucks greater than a 26,000-pound gross vehicle weight rating which operate in California be no older than 2010 model year by the time the proposed project would become operational in 2023. This would allow the proposed project to utilize trucks which are 9 years old and would not constitute an infeasible financial burden.

Table 3.2-13 displays emissions generated by project operation with the implementation of MMs AIR-2c and AIR-2d. As shown therein, under a dry storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 13 tons per year and 70 average pounds per day to approximately 12 tons per year and 64 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year

[29] California Air Resources Board (ARB). 2019. Truck and Bus Regulation Compliance Requirement Overview. June 18. Website: https://www.arb.ca.gov/msprog/onrdiesel/documents/fsregsum.pdf?_ga=2.176823522.653555524.1631722616-611272733.1590599157. Accessed September 16, 2021.

and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 16 tons per year and 90 average pounds per day to approximately 15 tons per year and 85 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year and 54 average pounds per day.

Under a dry storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 40 tons per year and 217 average pounds per day to approximately 35 tons per year and 192 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 71 tons per year and 388 average pounds per day to approximately 66 tons per year and 362 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day.

Table 3.2-13: Mitigated Operational Emissions

Emissions Source	ROG	NO_X	PM_{10} Total	$PM_{2.5}$ Total
	Tons per Year			
Dry Storage Project Scenario				
Area	10.18	<0.01	<0.01	<0.01
Energy	0.04	0.40	0.03	0.03
Mobile–Passenger Vehicles	0.83	0.90	3.07	0.83
Mobile–Trucks	0.67	31.93	1.13	0.56
Mobile–Locomotives	ND	1.68	0.04	0.04
Mobile–TRUs	–	–	–	–
Stationary	0.01	0.04	<0.01	<0.01
Total (tons/year)	*11.74*	*34.95*	*4.28*	*1.46*
Significance Threshold (Tons/Year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Total Average (pounds/day)	*64*	*192*	*23*	*8*
Significance Threshold (Tons/Year)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Cold Storage Project Scenario				

Emissions Source	ROG	NO_X	PM_{10} Total	$PM_{2.5}$ Total
	Tons per Year			
Area	10.18	<0.01	<0.01	<0.01
Energy	0.05	0.44	0.03	0.03
Mobile–Passenger Vehicles	0.83	0.90	3.07	0.83
Mobile–Trucks	0.67	31.93	1.13	0.56
Mobile–Locomotives	ND	1.68	0.04	0.04
Mobile–TRUs	3.71	31.15	0.43	0.40
Stationary	0.01	0.04	<0.01	<0.01
Total (tons/year)	15.46	66.14	4.71	1.86
Significance Threshold (Tons/Year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**
Total Average (pounds/day)	*85*	*362*	*26*	*10*
Significance Threshold (Tons/Year)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**Yes**	**Yes**	**No**	**No**

Notes:
[1] Totals may not add up due to rounding. Calculations use unrounded results. 365 working days per year is assumed to estimate average daily emission rates.
lb. = 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
ND = No Data
Source: CalEEMod Output (see Appendix B).

As previously discussed, unmitigated project operation would result in ROG and NO_X emissions which exceed BAAQMD significance thresholds. ROG emissions generated during project operation would principally be generated by consumer products, which cannot be sufficiently controlled by the proposed project due to the possible use of cleaning products, hairsprays, and other personal care products by employees. As ROG emissions generated under the control of the proposed project during project operation would principally be generated by the periodic reapplication of architectural coatings, MM AIR-2c would be required to ensure the use of low-VOC (i.e., ROG) architectural coating products that contain no more than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during project operation. Additionally, as NO_X emissions generated during project operation would principally be generated by the operation of the trucking fleet, irrespective of whether the fleet would accommodate the use of TRUs, MM AIR-2d would be

required to ensure the trucking fleet accessing the project site would be comprised of vehicles no older than model year 2014 to reduce tailpipe NO_X emissions.

It is important to note that the principal source for operational ROG emissions would be the use of consumer products by employees and visitors. Consumer products in this context consist of cleaning solvents and personal care products, such as hairspray. CalEEMod, Version 2020.4.0, utilizes a Statewide average VOC (i.e., ROG) per building square foot metric, irrespective of land use type, derived from the ARB's Statewide 2008 Consumer Product Inventory.[30] Because of this assumption built into the emissions modeling, nonresidential land uses, such as the proposed project, are likely to result in fewer operational ROG emissions generated by the use of consumer products than what is demonstrated in this analysis. Nonetheless, more accurate information is not available for the use of consumer products during project operation, thus this assumption must be relied upon for purposes of this analysis. In addition, because consumer products would be consumed by employees and visitors on-site and the use of those products would not be under the control of the property owner or tenant, consumer products cannot be guaranteed to be regulated through mitigation. As such, mitigation targeting the use of consumer products was omitted from this analysis.

Operational Carbon Monoxide Hotspot

The CO emissions from traffic generated by the proposed project are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

The BAAQMD recommends a screening analysis to determine whether a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The proposed project would result in a less than significant impact to air quality for local CO if all the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; and
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

As indicated in the TIS prepared for the proposed project,[31] no intersections impacted by the proposed project would experience traffic volumes of 44,000 vehicles per hour. According to the TIS, the study intersection which would experience the most traffic volume during the 'Existing Plus Project Traffic Volumes' scenario during AM and PM peak-hours would be the intersection of South

[30] California Air Pollution Control Officers Association (CAPCOA). 2021. CalEEMod Appendix E Technical Source Documentation. Website: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-e2020-4-0.pdf?sfvrsn=6. Accessed December 15, 2021.

[31] W-Trans. 2021. Traffic Impact Study for the Giovannoni Logistics Center. March 11.

Kelly Road and CA-29. As discussed therein, that intersection would experience an estimated 3,622 AM peak-hours vehicle trips and 3,338 PM peak-hour vehicle trips with the implementation of the proposed project. Therefore, the proposed project would not result in any nearby intersection having peak-hour traffic volumes exceeding 44,000 vehicles per hour.

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 that 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 trips generated by the proposed project do not include roadway segments where vertical or horizontal atmospheric mixing is substantially limited.

Finally, the proposed project would not conflict with a program, plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As discussed in Section 3.12, Transportation, all studied roadway segments and intersections would operate at acceptable levels of service with traffic generated by the proposed project in combination with existing traffic levels. Additionally, as described in Section 3.12, Transportation, because the proposed project would operate at acceptable levels of service consistent with the City of American Canyon standards, then the proposed project would be consistent with an adopted congestion management program. Therefore, based on the above criteria, the proposed project would not exceed the CO screening criteria and would have a less than significant impact related to CO.

The proposed project would generate criteria pollutant and ozone precursor emissions during construction and operation. The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-2a would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs.

Unmitigated project construction ROG emissions would exceed BAAQMD significance thresholds. Specifically, architectural coating activities during project construction would principally contribute to the exceedance. As such, MM AIR-2b would require project construction to utilize low-VOC (i.e., ROG) architectural coating products containing no greater than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during architectural coating activities. Implementation of MM AIR-2b would result in reducing ROG emissions from 68 average pounds per day to 33 average pounds per day, which is below the BAAQMD significance threshold of 54 pounds per day for ROG emissions.

Unmitigated project operation would result in ROG and NO_X emissions which exceed BAAQMD significance thresholds. ROG emissions generated during project operation would principally be generated by consumer products, which cannot be sufficiently controlled by the proposed project due to the possible use of cleaning products, hairsprays, and other personal care products by employees. As ROG emissions generated under the control of the proposed project during project operation would principally be generated by the periodic reapplication of architectural coatings, MM AIR-2c would be required to ensure the use of low-VOC (i.e., ROG) architectural coating products that contain no more than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during project operation. Additionally, as NO_X emissions generated during project operation would principally be generated by the operation of the trucking fleet, irrespective of whether the fleet would accommodate the use of TRUs, MM AIR-2d would be required to ensure the trucking fleet accessing the project site would be comprised of vehicles no older than model year 2014 to reduce tailpipe NO_X emissions.

Under a dry storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 13 tons per year and 70 average pounds per day to approximately 12 tons per year and 64 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2c would result in a reduction of ROG emissions during project operation from approximately 16 tons per year and 90 average pounds per day to approximately 15 tons per year and 85 average pounds per day, which exceed the BAAQMD significance thresholds for ROG emissions of 10 tons per year and 54 average pounds per day.

Under a dry storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 40 tons per year and 217 average pounds per day to approximately 35 tons per year and 192 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day. Under a cold storage scenario, implementation of MM AIR-2d would result in a reduction of NO_X emissions during project operation from approximately 71 tons per year and 388 average pounds per day to approximately 66 tons per year and 362 average pounds per day, which exceed the BAAQMD significance thresholds for NO_X emissions of 10 tons per year and 54 average pounds per day.

Consequently, implementation of MM AIR-2a and MM AIR-2b would sufficiently reduce project construction emissions to less than significant levels; however, implementation of MM AIR-2c and MM AIR-2d would not be sufficient to reduce project operation emissions to less than significant levels. Therefore, the proposed project would generate emissions which exceed the BAAQMD's significance thresholds after the implementation of applicable and feasible mitigation and would result in a significant and unavoidable impact. Therefore, this impact would be significant unavoidable after implementation of identified mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AIR-2a The following Best Management Practices (BMPs), as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the project and implemented during construction:

- All active construction areas shall be watered at least two times per day.
- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt tracked 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 shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed 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 5 minutes (as required by the California Airborne Toxics Control Measure (ATCM) Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City and the construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-2b Prior to the issuance of grading or building permits, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings during the proposed project's construction. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or volatile organic compounds (VOC) per liter of product.

MM AIR-2c Prior to issuing any certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of "Low-VOC" architectural coatings and electric landscaping equipment during the operation of the proposed project. "Low-VOC" architectural coatings used during project construction shall not exceed 50 grams of reactive organic gases (ROG) or

volatile organic compounds (VOC) per liter of product. Landscaping equipment referred to in this requirement shall include lawnmowers, leaf blowers, and chainsaws.

MM AIR-2d Prior to issuing the certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation demonstrating the use of a truck fleet that meets or exceeds model year 2014 for all heavy-duty trucks during operation of the proposed project. If the project applicant does not own the truck fleet that would be used during operation of the proposed project, the project applicant shall provide the City with documentation from the truck fleet owner or operator demonstrating that trucks utilized for operation of the proposed project will meet or exceed model year 2014. If any change occurs where a new truck fleet is utilized during operation of the proposed project, the project applicant shall provide the City with documentation demonstrating that the new truck fleet meets or exceeds this requirement.

To monitor and ensure that trucks that meet a model year of 2014 or newer are used for the proposed project, the fleet operator shall maintain records of all trucks and equipment associated with the proposed project's operation and make these records available to the City upon request. Alternatively, the City may require periodic reporting and provision of written records by operators and conduct regular inspections of the records to the maximum extent feasible and practicable.

Level of Significance After Mitigation

Significant unavoidable impact.

Sensitive Receptors Exposure to Pollutant Concentrations

Impact AIR-3:	**The proposed project would not expose sensitive receptors to substantial pollutant concentrations.**

Impact Analysis

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or contributes significantly to elevated pollutant concentration levels. As described in Section 3.2.2, Environmental Setting, beneath Table 3.2-6, the closest sensitive receptors include a single-family residence located approximately 200 feet south of the project site, as well as Calvary Baptist Christian Academy. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. As the proposed project would constitute the development of approximately 2.4 million square feet of industrial warehouse space and the operation of heavy-duty trucking fleets, a construction and operational HRA was prepared for the proposed project and is contained in Appendix B. The results of the HRA are summarized below.

Construction and Operation

Construction and Operational Related Diesel Particulate Matter

Because the proposed project could accommodate the construction and operation of 2.4 million square feet of cold storage space and the subsequent operation of TRUs in addition to truck and passenger vehicle activities, the HRA herein analyzes the cold storage project scenario as a conservative assessment. As shown in Table 3.2-14, health risks resulting from the construction and operation of a cold storage project scenario were found to be less than the BAAQMD's project-level significance thresholds.

Table 3.2-14 presents a summary of the results of the HRA prepared for the proposed project during project construction and operation. As previously discussed, the proposed project would develop Phase 1, which would become operational immediately following the completion of construction activities. As Phase 1 would become operational, Phase 2 of the proposed project would begin construction, resulting in an overlap of construction and operational emissions. As such, the HRA analyzes the proposed project's Phase 1 construction DPM emissions for the first year, Phase 1 operational and Phase 2 construction DPM emissions for the second year, and Phase 1 and 2 operational DPM emissions for the remainder of the 30-year exposure duration, consistent with the BAAQMD's Health Risk Assessment Guidelines.[32] The HRA also analyzes the proposed project's Phase 1 construction DPM emissions for the first year; Phase 1 operational and Phase 2 construction DPM emissions for the second year; Phase 1 and 2 operational DPM emissions of school receptor exposure at the Calvary Baptist Christian Academy; and the proposed project's operational DPM emission concentrations for the remainder of the 13-year exposure duration for a K-12 school, consistent with the BAAQMD's Health Risk Assessment Guidelines.

Because the proposed project could accommodate the construction and operation of 2.4 million square feet of cold storage space and the subsequent operation of TRUs in addition to truck and passenger vehicle activities, the HRA herein analyzes the cold storage project scenario as a conservative assessment. As shown in Table 3.2-14, health risks resulting from the construction and operation of a cold storage project scenario were found to be less than the BAAQMD's project-level significance thresholds.

Table 3.2-14: Summary of Construction Health Risks at the Maximum Impacted Receptor

Impact Scenario	Cancer Risk[1] (risk per million)	Chronic Non-Cancer Hazard Index[2]	TAC Concentration[3] (µg/m³)
Residential MIR Impact (Cold Storage Scenario)			
Scenario 1 (Phase 1 Construction)	0.44	<0.01	<0.01
Scenario 2 (Phase 2 Construction, Phase 1 Operation)	1.44	<0.01	0.01
Scenario 3 (Phase 1, Phase 2 Operation)	0.22	0.01	0.04

[32] 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 September 16, 2021.

Impact Scenario	Cancer Risk[1] (risk per million)	Chronic Non-Cancer Hazard Index[2]	TAC Concentration[3] (µg/m³)
Total (30 Year Duration)	*2.10*	*0.01*	*0.05*
Thresholds of Significance	**10**	**1**	**0.3**
Exceeds Individual Source Threshold?	**No**	**No**	**No**
School MIR Impact (Cold Storage Scenario)			
Scenario 1 (Phase 1 Construction)	0.01	<0.01	<0.01
Scenario 2 (Phase 2 Construction, Phase 1 Operation)	0.03	<0.01	<0.01
Scenario 3 (Phase 1, Phase 2 Operation)	<0.20	<0.01	<0.01
Total (30 Year Duration)	*0.24*	*<0.01*	*<0.01*
Thresholds of Significance	**10**	**1**	**0.3**
Exceeds Individual Source Threshold?	**No**	**No**	**No**

Notes:
$PM_{2.5}$ = particulate matter, including dust, 2.5 micrometers or less in diameter
REL = reference exposure level DPM = diesel particulate matter TAC = toxic air contaminants
MIR = Maximally Impacted Sensitive Receptor µg/m³ = micrograms per cubic meter
[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 REL of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified from the project air dispersion models. The residential MIR was located at 38.20613°N -122.25739°E and the school MIR was identified as the Calvary Baptist Christian Academy.
Emissions Source: Appendix B.
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 3.2-14, the proposed project would not result in significant health impacts to the maximally impacted residential or school receptors under the cold storage scenario. Therefore, the proposed project would have a less than significant health risk impacts.

Community Health Risk Assessment

A community HRA was conducted in accordance with BAAQMD recommendations. The cumulative health risk values were determined by adding the health risk values from refined modeling of the proposed project to the screening-level health risk values from each individual stationary and mobile source within a 1,000-foot radius of the site. The HRA concluded that the main source of a cumulative community health risk within 1,000 of the project site are the existing sources. The analysis results presented in the HRA, contained in Appendix B, are shown in Table 3.2-15. As shown therein, health risks to nearby sensitive receptors would not exceed the BAAQMD community health risk significance thresholds. As the proposed project did not result in an exceedance of project-level BAAQMD significance thresholds, the proposed project would not result in a potentially significant impact and the proposed project's impacts would not be cumulatively considerable. Therefore, this impact would be less than significant.

Table 3.2-15: Summary of Construction Health Risks at the Maximum Impacted Receptor

Source	Source Type	Distance from MIR[1] (feet)	Cancer Risk (per million)	Chronic HI	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Project					
Residential MIR	Diesel Construction Equipment, Trucking Fleets, and Passenger Vehicles	1,860	2.10	0.01	0.05
Existing Stationary Sources (BAAQMD Facility Number)[2]					
California Stonecraft Facility ID 24284	Polyester Resin Operation	1,455	ND	<0.01	ND
William Kreysler and Assoc Inc Facility ID 12852	Polyester Resin Operation, Solvent Cleaning	1,440	ND	<0.01	ND
City of American Canyon/Accounts Payable Facility ID 14432	Generators	450	0.12	0.00	0.00
All Bay Mill and Lumber Co Facility ID 4793	Woodworking	2,085	ND	ND	0.11
Ikea Facility ID 200845	Generators	1,750	61.11	0.02	0.08
Roadways					
Existing Local Roadway Network		–	0.11	ND	<0.01
Rail					
Existing Rail Lines (California Northern Railroad)		140	4.87	ND	0.01
Freeways					
Existing Freeways (Highway 29)		225	5.58	ND	0.10
Cumulative Health Risks					
Cumulative Maximum with Project DPM Emissions			**73.89**	**0.03**	**0.35**
BAAQMD's Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
MIR = Maximally Impacted Sensitive Receptor BAAQMD = Bay Area Air Quality Management District
$\mu g/m^3$ = micrograms per cubic meter HI = health index
DPM = diesel particulate matter $PM_{2.5}$ = particulate matter, including dust, 2.5 micrometers or less in diameter
ND = No Data
[1] The residential MIR located at 38.20613°N -122.25739°E was identified as the primary MIR here as it would experience the greatest health impact between residential and school receptors.
[2] Assumes emissions remain constant with time. Values represent the greatest identified among all MIRs presented in this analysis, including the two previously identified residences and the previously identified school.
Source: Appendix B.

Carbon Monoxide Hotspot

As discussed in Impact AIR-2, the proposed project would not generate sufficient vehicle traffic during project operation to substantiate creating a CO hotspot. Therefore, this impact would be less than significant with regard to exposing sensitive receptors to substantial concentrations of CO emissions. As such, the proposed project would result in less than significant impacts related to exposing sensitive receptors to substantial pollutant concentrations.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None Required.

Level of Significance After Mitigation

Less than significant impact.

Objectionable Odors Exposure

Impact AIR-4:	**The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Impact Analysis

Construction

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. It is anticipated that by the time such emissions reach any sensitive receptor sites, they would be diluted to well below any air quality or odor concern level. Therefore, construction odor impacts would be less than significant.

Operation

The proposed project would construct and operate a logistics center including at least three warehouse buildings intended for distribution centers. Operation of this type of project would likely not generate objectionable odors that may affect a substantial number of nearby receptors. The types of uses that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. Though the specific uses of the buildings have not been determined, it is not anticipated that a wastewater treatment plant or solid waste transfer station would be accommodated at the project site.

As shown previously in Table 3.2-8, food manufacturing plants and chemical manufacturing have odor screening distances of one mile and two miles, respectively, from the facility to sensitive receptors. Sensitive receptors surrounding the project site within these screening distances are generally to the south and consist of school and residential land uses. Thus, as the future tenants

propose the land use for distribution and/or sortation facilities, implementation of the proposed project would not create or expose a substantial number of people to objectionable odors, a potentially significant impact. As such, this impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant impact.

3.3 - Biological Resources

3.3.1 - Introduction

This section describes the existing biological setting and potential effects from project implementation on the project site and the surrounding area. This section also identifies mitigation measures to reduce these potential effects to less than significant levels. Descriptions and analysis in this section are based in part on a Biological Resources Report performed by Huffman-Broadway Group, Inc. (HBG) in May 2021, provided in Appendix C.

3.3.2 - Environmental Setting

Climate

The project site is located in the City of American Canyon, which is part of the greater north San Francisco Bay Area. Like other portions of Northern California, American Canyon experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. The project area typically exhibits annual low/high temperatures between 40-80°F (degrees Fahrenheit) and an annual average rainfall of approximately 20 inches.

Hydrology

The 208-acre project site is currently undeveloped land. The headwaters of No Name Creek occur within the northwestern portion of the project site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park Wetland Preserve. The drainage is hydrologically connected to Fagan Slough, which flows into the Napa River. The majority of wetlands that occur throughout the site and are supported by direct precipitation.

Topography and Soils

The majority of the project site is relatively flat at approximately 40 feet mean sea level and a total elevation variance of 30 feet. The project site generally slopes at about 0 to 2 percent with two highpoints to the southeast and southwest of the gradually sloping north toward No Name Creek. Although the remaining portions of the project site are relatively flat, grazing and inundation in topographic low areas has created a hummocky landscape with depressional microrelief. As a result, there are small seasonal wetlands and swales scattered throughout the site. Other large, and deep wetlands occur on the eastern and southern portions of the site. In the southeastern portion of the project site a berm confines surface water sheet flows creating several inundated depressional features.

Soil survey information for the project site was obtained from the National Resources Conservation Service Web Soil Survey.[1] Three different soil types were mapped by the Natural Resources Conservation Service (NRCS) within the project site. The mapped soil units include Clear Lake clay

[1] Natural Resources Conservation Service (NRCS). 2021. Official Soil Series Descriptions. United States Department of Agriculture (USDA). Website: http://www.nrcs.usda.gov/. Accessed May 2021.

drained (116), 0 to 2 percent slopes, Haire loam (146), 2 to 9 percent slopes, and Haire clay loam (148), 2 to 9 percent slopes. Exhibit 3.3-1 provides a soils map.

Plant Communities

Plant communities are assemblages of plant species growing in an area of similar biological and environmental factors. The project site contains three plant communities, as shown in Exhibit 3.3-2: Annual Grassland, Seasonal Wetlands (also referred to as palustrine emergent wetlands according to Cowardin classification) and Vernal Pool. This identification of habitat types on the property matches the findings of Monk & Associates as stated in their wetland delineation technical letter report submitted to the United States Army Corps of Engineers (USACE)[2] and Helm Biological Consulting as described in their rare plant survey. An inventory of plant species found on the project site during biological studies conducted by Monk & Associates is provided in the HBG report (Appendix C).

Annual Grassland

The Annual Grassland on the project site consist of naturalized annual grasslands, dominated by introduced annual grasses and forbs,. Dominant non-native annual grass species on the project site include Italian ryegrass (*Festuca perennis*), Mediterranean barely (*Hordeum marinum* ssp. *gussoneanum*), medusa head (*Elymus caput-medusae*), and soft chess (*Bromus hordeaceus*). Common non-native forbs found on the project site include bird's foot trefoil (*Lotus corniculatus*), subterranean clover (*Trifolium subterranean*), broadleaf filaree (*Erodium botrys*), English plantain (*Plantago lanceolata*), yellow glandweed (*Parentucellia viscosa*), Mediterranean linseed (*Bellardia trixago*), spring vetch (*Vicia sativa*), and bristly ox-tongue (*Helminthotheca echioides*). Native forbs and wildflowers were also present and include yellow owl's clover (*Triphysaria versicolor* ssp. *faucibarbata*), hayfield tarplant (*Hemizonia congesta* ssp. *luzulifolia*), and coastal tarweed (*Deinandra corymbosa*). Other common species noted by HBG Biologists during winter surveys in 2020 included species such as Harding grass (*Phalaris aquatica),* rip-gut brome (*Bromus diandrus*), field bindweed (*Convolvulus arvensis*), and sweet fennel (*Foeniculum vulgare*), and scattered coyote brush (*Baccharis pilularis*) and Himalaya berry (*Rubus armeniacus*) around the edges of the property.

Seasonal Wetland

The seasonal wetland habitat is referenced throughout this document and the supporting studies as palustrine emergent wetlands or seasonal wetlands. The seasonal wetlands on the property are vegetated with a variety of native and non-native species adapted for life in saturated soil conditions. Monk & Associates and Helm Biological Consulting noted the vegetation in the seasonal wetlands as being dominated by mix of native and non-native species such as Italian ryegrass, rabbit's foot grass (*Polypogon monspeliensis*), ditch beard grass (*Polypogon interruptus*), Bermuda grass (*Cynodon dactylon*), curly dock (*Rumex crispus*), Baltic rush (*Juncus balticus* ssp. *ater*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), saltgrass (*Distichlis spicata*), pennyroyal (*Mentha pulegium*), rough cocklebur (*Xanthium strumarium*), tall flat-sedge (*Cyperus eragrostis*), and swamp timothy (*Crypsis schoenoides*), and in some areas of deeper inundation,

[2] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

broadleaf cattail (*Typha latifolia*). Plants noted in the seasonal wetlands during winter surveys conducted by HBG included species such as annual hairgrass (*Descampsia danthanoides*), Mediterranean barley, saltgrass, pennyroyal, rough cocklebur, tall flat-sedge, and swamp timothy, and in some areas of deeper inundation, broadleaf cattail.[3]

Vernal Pool

Vernal pools on the property are dominated with a variety of native species adapted for life in seasonally flooded depressions. Monk and Associates and Helm Biological Consulting[4] noted the vegetation in the vernal pool wetlands as being dominated by primarily native species such as annual semaphore grass (*Pleuropogon californicus* var. *californicus*), and creeping spikerush (*Eleocharis macrostachya*). Other subdominant species included: water pygmy weed (*Crassula aquatica*), common spike rush (*Eleocharis macrostachya*), smooth goldfields (*Lasthenia glaberrima*), Jepson's button celery (*Eryngium aristulatum* var. *aristulatum*), and hyssop loosestrife (*Lythrum hyssopifolia*), along with a few non-native wetland species such as rabbit's foot grass and brass buttons (*Cotula coronopifolia*).

Wildlife

The project site provides limited habitat for wildlife species, mostly those adapted to open areas and farm fields and disturbed environments. Grasses and herbaceous plants within the project site provide limited nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles, and amphibians. Seasonal wetlands provide wildlife with a seasonal water source that supports various animal species during the winter and spring months and sometimes into the early summer. Amphibians will lay their eggs in seasonal wetland habitats and complete much of their life cycle in the wetlands. No Name Creek would be considered a wildlife corridor, but the property is nearly entirely surrounded by development so the extent of wildlife corridors on the property is limited.

A number of wildlife species were documented during a winter season survey conducted at the project site by HBG on December 10, 2020. All species documented at the site are common to abundant in the region and would be expected in the non-native grasslands and seasonal wetlands present at the site. Bird species documented included various species adapted to grasslands and open areas including Canada goose (*Branta canadensis*), California gull (*Larus californicus*), mourning dove (*Zenaida macroura),* Eurasian collared-dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), black phoebe (Sayo*rnis nigricans*), Say's phoebe (*Sayornis saya*), savannah sparrow (*Passerculus sandwichensis*), red-winged blackbird (*Agelaius phoeniceus),* and western meadowlark (*Sturnella neglecta*). Other species in taller vegetation and landscaping around the edges of the site and just off-site included California scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), northern mockingbird (*Mimus polyglottos)*, European starling (*Sturnis vulgaris*), white-crowned sparrow (*Zonotrichia*

[3] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[4] Helm Biological Consulting. 2021. Protocol-Level Special-Status Plant Survey at the Giovannoni Logistics Center Project, Napa County, California. August 2021.

leucophrys), California towhee (*Melozone crissalis*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*). Raptors (birds of prey) observed foraging over the grasslands and wetlands of the project site were fairly common during the winter survey and included American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus hudsonius*), and turkey vulture (*Cathartes aura*).[5]

HBG conducted a spring season site reconnaissance surveys on April 16 and May 24, 2021, on the project site. Many of the bird species observed included species observed during the winter, but additional resident species observed during the April and May visits included ring-necked pheasant (*Phasianus colchicus*), wild turkey (*Meleagris gallopavo*), great blue heron (*Ardea herodia*), great egret (*Ardea alba*), and killdeer (*Charadrius vociferus*). Additional species added during the spring survey included spring arrivals of migrant species. Breeding season raptor observations included foraging northern harrier (a State designated Species of Special Concern for nesting habitat that was also observed foraging over the site in winter), as well as foraging by State listed threatened Swainson's hawk (*Buteo swainsoni*). A California Fully Protected golden eagle (*Aquila chrysaetos*) was also observed over the project site being harassed by the Swainson's hawk and flying low exhibiting foraging behavior. These three special-status raptor species have nested in this part of Napa County in the past, and it is entirely possible these individuals could be nesting somewhere in the vicinity of the project site. HBG drove about 10 miles of local roads surrounding the project site during both the April and May 2021 field reviews to inspect trees for raptor nest structures. No Swainson's hawk nest structures were observed. Additional species observed in the spring survey included cliff swallow (*Petrochelidon pyrrhonota*) and barn swallow (*Hirundo rustica*).

During their biological studies related to the Green Island Road Widening and Devlin Road Extension projects in 2018 and 2019, Monk & Associates observed several species of waterfowl and shorebirds in the on-site seasonal wetlands. These species were not observed during the December 10, 2020, or April 16, 2021, surveys by HBG as surface ponding was lacking on the site then due to the paucity of rain. These species included mallard (*Anas platyrhynchos*), American wigeon (*Anas americana),* greater yellowlegs (*Tringa melanoleuca*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), western sandpiper (*Calidris mauri*), and Wilson's snipe (*Gallinago delicata*).

No amphibians were documented on the property by HBG, but Pacific treefrog (*Pseudacris regilla*) was noted by Monk & Associates Biologists while studying the Green Island Road Extension. Reptile sightings at the site by HBG included western fence lizard (*Sceloperus occidentalis);* other reptiles likely include Pacific gopher snake (*Pituophis catenifer)* and common garter snake (*Thamnophis sirtalis elegans)*. Observed evidence of mammals on the site by HBG were black-tailed jackrabbit (*Lepus californicus*), dens of Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*), several California ground squirrels (*Otospermophilus beecheyi*) in a rubble pile in the southwestern portion of the site, and three mule deer (*Odocoileus hemionus*) in the southeastern portion of the property. Monk & Associates apparently observed raccoon (*Procyon lotor*) while conducting studies for the Devlin Road Extension project.[6] Other expected mammals would be those

[5] Huffman-Broadway Group, Inc. 2021. Biological Resources Report, Giovannoni Logistics Center, American Canyon, California. San Rafael, California. 52 pp. plus attachments. Prepared for Buzz Oates Construction, Inc., Sacramento, California. May 2021.

[6] Monk & Associates. 2018. Biological Resource Analysis, Devlin Road/Vine Trail Extension project, City of American Canyon, California. Prepared for GHD Inc., Santa Rosa, California. October 15, 2018

adapted to disturbed, urban environments such as Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), and striped skunk, (*Mephitis mephitis*).

Special-Status Species

Special-status species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special-status species also include those species listed by the California Department of Fish and Wildlife (CDFW) as Species of Concern which face extirpation in California if current population and habitat trends continue, those identified as Fully Protected in the California Fish and Game Code (a designation that provides additional protection to those animals that are rare or face possible extinction), and bird species designated as Bird Species of Conservation Concern by the United States Fish and Wildlife Service (USFWS). These State and federal Species of Concern must be evaluated in the context of evaluation under CEQA. Under Title 14, California Code of Regulations Section 15380, mentioned above, many Biologists and the lead agencies for whom they work evaluate impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2. Special-status species included in CEQA review also include bat species that have been designated with conservation priority by the Western Bat Working Group.

The CDFW maintains records for the distribution and known occurrences of special-status species and sensitive habitats in the California Natural Diversity Database (CNDDB). The CNDDB is organized into map areas based on 7.5-minute topographic quadrangle maps produced by the United States Geologic Survey (USGS). All known occurrences of special-status species are mapped onto quadrangle maps maintained by the CNDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat. The project site is within the *Cuttings Wharf* 7.5-minute Topographic Quadrangle Map.

Special-Status Plant Species

A list of special-status plants with potential to occur on the project site was developed from the CNDDB. A complete list of special-status plant species occurring in the vicinity of the property is included in the HBG report (Appendix C). The table includes all species of flora mentioned in the CNDDB within approximately 10 miles of the site.

No special-status plants have been mapped on or adjacent the project site. However, according to the CNPS Inventory and the CDFW CNDDB, a number of special-status plant species are known to occur in the project site vicinity. No special-status plants were identified on the project site by Monk & Associates while conducting various studies on the property in 2016, including an aquatic resources delineation and other evaluations conducted during the March to July flowering season of

2016.[7] No special-status plants or milkweed species (*Asclepias* ssp.) were identified on the project site by Helm Biological Consulting while conducting the protocol-level special-status plant survey conducted on April 7, 2021, May 4, 2021, and May 17, 2021.

Special-Status Wildlife

Animal species noted in the CNDDB as occurring within a 10-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG Biologists, are discussed in in the HBG report (Appendix C). A number of special-status animal species are noted in the CNDDB as occurring in the general vicinity of the project site with habitat requirements similar to the habitats present on the project site. These species include vernal pool fairy shrimp (*Branchinecta lynchi*), California red-legged frog (*Rana draytonii),* western pond turtle (*Emmys marmorata*), Swainson's hawk, golden eagle, northern harrier, burrowing owl (*Athene cunicularia*) and tricolored blackbird (*Aegelaius tricolor*). The CDFW is also concerned over rapid declines in populations of monarch butterflies (*Danuas plexippus*) and a discussion of this species in relation to the proposed project is also discussed in the 2021 HBG report.[8]

None of the other animal species discussed in the table have the potential to occur on the site. This finding is made based on the habitat requirements of species listed in the table and is based on field review of habitats present at the site and the immediate vicinity and an evaluation of the suitability of on-site habitats to support these species.

Wetlands

Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon

Region 1 of the USFWS developed the "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" dated December 15, 2005. The recovery plan covers 33 species of plants and animals that occur exclusively or primarily within a vernal pool ecosystem in California and southern Oregon. The recovery plan goals include protecting and conserving intact vernal pools and vernal pool complexes within the recovery planning area to maintain viable populations of listed species and species of concern and prevent additional threats from emerging over time. The recovery plan includes designated "core" areas that are specific sites necessary to recover these endangered or threatened species or to conserve the species of concern addressed in this recovery plan.

The project site is near two core areas referred to as the "Napa River Core Area." One core area is located approximately 2.5 miles northeast of the project site at the Highway 12 and 121 interchange. The second Napa River Core Area is adjacent to the project site near the northwest boundary of the Wetland Preserve area. The project site itself is not within a core area.

The project site does support 0.13-acre of vernal pool habitat located within the 45-acre Wetland Preserve area and 1.13-acres of vernal pool habitat within the Phase 2 project footprint.

[7] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[8] Huffman-Broadway Group, Inc. 2021. Biological Resources Report, Giovannoni Logistics Center, American Canyon, California. San Rafael, California. 52 pp. plus attachments. Prepared for Buzz Oates Construction, Inc., Sacramento, California. May 2021.

Aquatic Resources Delineation Results

The Aquatic Resources Delineation Map prepared by Monk & Associates was submitted to the San Francisco District of the USACE on August 29, 2016, and was confirmed by letter from the USACE dated November 8, 2016. The wetlands found on the project site as mapped by Monk & Associates and verified by the USACE are provided in Attachment 4 of the HBG report. The mapped areas classified as wetlands exhibited a dominance of hydrophytic vegetation, as well as hydric soils and wetland hydrology. Hydrological indicators in mapped wetlands included the presence of oxidized rhizospheres along living roots (C3), surface soil cracks (B6), algal matting (Biotic Crust B12), aquatic invertebrates (B13), and vegetation suppression (indicating long-term inundation) within these wetland areas. Evidence of hydric soils included Redox Dark Surface F6 and Depleted Matrix F3 as defined in the approved regional supplement for the Arid West Region and the Field Indicators of Hydric Soils in the United States.

The majority of the seasonal wetlands on the project site gradually drain north toward No Name Creek. No Name Creek, within the project site, does not exhibit an ordinary high water mark (OHWM), and is therefore categorized as a seasonal wetland. No Name Creek flows off the project site to the west and enters the adjacent Napa River Core Area before draining into Fagan Slough, a tidal water of the United States. Fagan Slough is tributary to the Napa River, a traditional navigable water that flows to San Pablo Bay. Therefore, the 11.93 acres of seasonal wetlands in the north and southwest corner of the site are regulated as "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and are subject to USACE jurisdiction (see Attachment 4 of the HBG report). Several features in the southeastern portion of the project site are mapped as "isolated" seasonal wetlands since they do not have hydrologic connectivity to any water of the United States. The "isolated" features are contained within discrete topographic depressions, surrounded by uplands and berms that are higher in elevation, thereby isolating these features from any water of the United States. A total of 0.84 acre of "isolated" features that are mapped on the project site are not subject to USACE jurisdiction as shown on Exhibit 6.

The total area of USACE jurisdictional wetlands mapped on the project site is 11.93 acres. The total area of "isolated" wetlands mapped on the project site is 0.84 acre. HBG has determined that the areas mapped as isolated wetlands and not subject to jurisdiction of the USACE under the federal CWA would be subject to the wetland criteria of the State Porter-Cologne Water Quality Control Act and the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) as a water of the State. A total of 12.77 acres of wetlands would be subject to the regulatory jurisdiction of the San Francisco Bay RWQCB as waters of the State. The portion of the project site along the northern boundary of the site contained within the confines of No Name Creek would be subject to the regulatory jurisdiction of the CDFW under Fish and Game Code Section 1602.

3.3.3 - Regulatory Framework

Federal

Clean Water Act–Section 404

The USACE regulates discharges of dredged or fill material into waters of the United States under Section 404 of the CWA. "Discharge of fill material" is defined as the addition of fill material into waters of the United States, including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 Code of Federal Regulations [CFR] § 328.2(f)). In addition, Section 401 of the CWA (33 United States Code [USC] 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

The USACE and the United States Environmental Protection Agency (EPA) are responsible for implementing the Section 404 program. Section 404(a) authorizes the USACE to issue permits, after notice and opportunity for comment, for discharges of dredged or fill material into waters of United States. Section 404(b) requires that the USACE issue permits in compliance with EPA guidelines, which are known as the Section 404(b)(1) Guidelines. Specifically, the Section 404(b)(1) guidelines require that the USACE only authorize the "least environmentally damaging practicable alternative" and include all practicable measures to avoid and minimize impacts to the aquatic ecosystem. The guidelines also prohibit discharges that would cause significant degradation of the aquatic environment or violate State water quality standards.

Waters of the United States include both wetlands and "other waters of the United States." Wetlands and other waters of the United States are described by the EPA and USACE regulations (40 CFR § 230.3(s) and 33 CFR § 328.3(a), respectively). The EPA and USACE define wetlands as " . . . those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA regulations at 40 CFR § 230.3(t); USACE regulations at 33 CFR § 328.3(b)). Both natural and man-made wetlands and other waters (not vegetated by a dominance of rooted emergent vegetation) are subject to regulation. Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

The geographic extent of wetlands is defined by the collective presence of a dominance of wetland vegetation, wetland hydrology conditions, and wetland soil conditions as determined following the USACE 1987 Wetlands Delineation Manual (1987 Manual); the USACE 2008 Regional Supplement to Corps of Engineers Wetland Delineation Manual: Arid West, Version 2.0 (Arid West Regional Supplement); and supporting guidance documents. The geographic extent of other waters of the United States is defined by an OHWM in non-tidal waters (33 CFR § 328.3€) and by the high tide line within tidal waters (33 CFR § 328.3(d)). The OHWM is defined by the USACE as "that line on shore

established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR § 328.3(e)). Tidal waters are also under the jurisdiction of the USACE. The landward limits of jurisdiction in tidal waters extend to the high tide line or " . . . when adjacent non-tidal waters of the United States are present, to the limits of jurisdiction for such non-tidal waters" (33 CFR § 328.4(b)). High tide is further defined to include the line reached by spring high tides and other high tides that occur with periodic frequency (33 CFR § 328.3(d)).

Solid Waste Agency of Northern Cook County and Rapanos

In the U.S. Supreme Court decision *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC),* No. 99-1178 (2001)*,* some isolated wetlands may be excluded from the USACE Section 404 jurisdiction because they are (1) non-tidal, (2) non-navigable, (3) not hydrologically connected to navigable waters or adjacent to such waters, and (4) not subject to foreign or interstate commerce. Subsequent to SWANCC, the U.S. Supreme Court decided on *Rapanos v. United States* and *Carabell v. United States*, 126 U.S. 2208 (2006) (herein referred to as Rapanos). In 2007, guidance was given to EPA regions and USACE districts to implement the Supreme Court's decision that addresses the jurisdiction over waters of the United States under the CWA. The Rapanos guidance requires the USACE to conduct detailed analysis of the functions and values of wetlands and other waters of the United States potentially on-site and in some cases off-site, to determine whether there is a nexus to traditional navigable waters and to evaluate the significance of the nexus to the traditional navigable water. Neither the Court nor the recently issued guidance draw a clear line with respect to the geographic reach of jurisdiction, particularly in drainages where flows are ephemeral and where wetlands are adjacent to but not directly abutting relatively permanent water.

Navigable Waters Protection Rule

In 2020, the Trump administration obtained approval of the Navigable Waters Protection Rule (NWPR) that altered the reach of the regulations interpreting the scope of nation's CWA. The NWPR has four categories of jurisdictional waters and 12 categories of excluded waters/features. There is no stand-alone interstate waters category and no case-specific significant nexus analysis. Key changes were made for defining tributary, adjacent wetland, ditches, lakes, ponds, and impoundments. New definitions for defining typical year versus normal, perennial, intermittent, ephemeral, snowpack, and ditches. No change was made to the definition of wetlands or the methodology for defining wetlands. Under the NWPR, waters of the United States includes (1) territorial seas and traditional navigable waters; (2) tributaries; (3) lakes and ponds, and impoundments of jurisdictional waters; and (4) adjacent wetlands.

A ruling in the U.S. District Court for the District of Arizona on August 30, 2021, in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency,* may result in the Final NWPR being overturned permanently. The EPA and USACE are reviewing the U.S. District Court's order vacating and remanding the NWPR, have halted implementation of the NWPR, and are currently interpreting "waters of the United States" consistent with the pre-2015 waters of the United States definition and EPA and USACE regulatory policies and guidance regime until further notice.

Clean Water Act–National Pollution Discharge Elimination System Requirements

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related stormwater discharges under the NPDES Program. On November 16, 1990, the EPA published final regulations that establish stormwater permit application requirements for specified categories of industries. The regulations provide that discharges of stormwater from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit.

The State Water Board has developed a general construction stormwater permit to implement the requirements for the federal NPDES permit. The permit requires submittal of a Notice of Intent (NOI) to comply, fees, and the implementation of a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that would prevent construction pollutants from entering stormwater and keep products of erosion from migrating off-site into downstream receiving waters. The Construction General Permit includes post-construction requirements that include no increase in overall site runoff or the concentration of drainage pollutants and requires implementation of Low Impact Development (LID) design features. The Construction General Permit is implemented and enforced by California's nine RWQCBs.

The RWQCBs have also adopted requirements for NPDES stormwater permits for medium and large municipalities, and the State Water Board has adopted a General Permit for the discharge of stormwater from small municipal storm sewer systems. This General Permit requires projects to develop and implement a post-construction Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable.

Federal Endangered Species Act

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The Endangered Species Act establishes an official listing process for plants and animals considered in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532 and 1536).

The Endangered Species Act prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532). Taking can result in civil or criminal penalties. Federal regulation 50 Code of Federal Regulations 17.3 further defines the term "harm" in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Therefore, the Endangered Species Act is invoked when the property contains a federally listed threatened or endangered species that may be affected by a permit decision.

In the event that listed species are involved and a USACE permit is required for impacts to jurisdictional waters, the USACE must initiate consultation with the USFWS or the National Marine Fisheries Service (NOAA Fisheries) pursuant to Section 7 of the Endangered Species Act (16 USC 1536; 40 CFR § 402). Section 7 of the Endangered Species Act requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat (16 USC 1536). In the regulations found at 50 Code of Federal Regulations 402.2, destruction or adverse modification is defined as a "direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." Critical habitat is defined in Endangered Species Act Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and that "may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species." Critical habitat designations identify, with the best available knowledge, those biological and physical features (primary constituent elements) which provide for the life history processes essential to the conservation of the species.

If formal consultation is required, USFWS or NOAA Fisheries will issue a Biological Opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the proposed project may proceed, and authorizing incidental take of the species.

For discretionary permit actions by non-federal entities, Section 10 of the Endangered Species Act provides a mechanism for obtaining take authorization through submittal and approval of a Habitat Conservation Plan that details species impacts, measures to minimize or mitigate such impacts, and funding mechanisms to implement mitigation requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties devised to protect migratory birds and any of 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 regulations governing migratory bird permits are in 50 Code of Federal Regulations Part 13 General Permit Procedures and 50 Code of Federal Regulations Part 21 Migratory Bird Permits. Most bird species within California fall under the provisions of the MBTA. Excluded species include non-native species such as house sparrow, starling, and ring-necked pheasant and native game species such as quail.

On December 22, 2017, the United States Department of Interior's Office of the Solicitor issued Memorandum M-37050, which states an interpretation that the MBTA does not prohibit the accidental or "incidental" taking or killing of migratory birds. In response to the Trump administration's attempted changes to the MBTA, eight states, including California, filed suit in September of 2018, arguing that the new interpretation inappropriately narrows the MBTA and should be vacated. On August 11, 2020, the Southern District of New York ruled in favor of the long-standing interpretation of the MBTA to protect migratory birds, reinstating the historical ban on

incidental take. Just days before leaving office, the Trump administration finalized its pullback of MBTA regulations, despite the ruling of the federal court. On his first day in office, President Biden placed Trump's changes to the MBTA on hold, pending further review.

Fish and Wildlife Coordination Act

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

USFW–S-Survey Guidelines for the Listed Large Branchiopods

The USFWS has published recovery plans for vernal pool species in Southern California and in Northern California and southern Oregon. These recovery plans list actions that will assist in the recovery of the vernal pool species, which include separate actions to develop survey guidelines and to conduct directed species status surveys or monitoring surveys.

The USFWS issued *Survey Guidelines for the Listed Large Branchiopods* dated May 31, 2021. These guidelines were created to provide a method to best detect the presence of the listed large branchiopods in a vernal pool or similar wetland feature. The guidelines are issued as guidance to Section 10(a)(1)(A) permittees. Because taking (killing, injuring, harming, or harassing) endangered or threatened species is strictly prohibited under the Endangered Species Act, a Section 10(a)(1)(A) recovery permit must be obtained prior to initiating any surveys or studies that might result in the take of endangered or threatened large branchiopods. These guidelines provide a survey method for wet season and dry season surveys.

State

Section 401 of the Federal Clean Water Act/Porter-Cologne Water Quality Control Act

Pursuant to Section 401 of the federal CWA, projects that require a USACE permit for the discharge of dredge or fill material must obtain water quality certification that confirms a project complies with State water quality standards before the USACE permit is valid. State water quality is regulated/administered by the California State Water Resources Control Board (State Water Board) and its nine RWQCBs. A water quality certification from a RWQCB must be consistent with not only the CWA, but with CEQA, the California Endangered Species Act (CESA), and the State Water Board requirement to protect beneficial uses of waters of the State.

The State also maintains independent regulatory authority over the placement of waste, including fill, into waters of the State under the Porter-Cologne Water Quality Control Act. Waters of the State are defined more broadly than "waters of the United States" to mean "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 13050(e)). Examples include, but are not limited to, rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked baylands, seasonal wetlands, and riparian woodlands. Waters of the State include all waters within

the State's boundaries, whether private or public, including waters in both natural and artificial channels. They include all "waters of the United States" and all surface waters that are not "waters of the United States" (e.g., non-jurisdictional wetlands; groundwater; and the territorial seas).

The State Water Boards *State Wetland Definition and Procedures for Discharges of Dredge of Fill Material to Waters of the State* adopted April 2, 2019 (the Procedures) along with the *Implementation Guidance for the Procedures* dated April 2020 (the Implementation Guidance) defines a wetland as an area that under normal circumstances, (1) has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. The Procedures, along with the Implementation Guidance, state that the permitting authority (e.g., RWQCB) shall rely on any wetland area delineation from a final aquatic resource report verified by the USACE. If the USACE does not require an aquatic resource delineation report, an applicant must submit a delineation of all waters, but these delineations shall be verified by RWQCB's staff during application review. Similarly, if the USACE does not require a delineation, but similar information is prepared for the CDFW, the applicant can submit that information to the RWQCB, which shall determine if it is sufficient for the RWQCB's purposes. In addition, as a matter of policy, the State Water Board/RWQCBs consider wetlands and waters determined to be non-jurisdictional by the USACE/EPA under SWANCC or Rapanos guidance or the NWPR to remain jurisdictional as waters of the State subject to State Water Board/RWQCB jurisdiction.

The Procedures along with the Interim Guidance also include procedures for the submission, review, and approval of applications for activities that could result in the discharge of dredged or fill material to any waters of the State and include elements of the CWA Section 404(b)(1) Alternatives Analysis Guidelines, thereby bringing uniformity to the State Water Board regulation of discharges of dredged or fill material to all waters of the State. Typically, the USACE requires a CWA 404(b)(1) Alternatives Analysis for wetland impacts greater than 0.50 acre. The Procedures require an alternatives analyses to be completed in accordance with a three-tier system. The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the discharge.

The State Water Board has also developed a general construction stormwater permit to implement the requirements of the federal NPDES permit. Projects approved by a RWQCB must, therefore, include the pre-construction requirement for a SWPPP and the post-construction requirement for a SWMP.

California Endangered Species Act

The State of California enacted CESA in 1984. The CESA is similar to the Endangered Species Act but pertains to State listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents. CESA generally prohibits the taking of State listed endangered or threatened plant and wildlife species; however, for projects resulting in impacts to State listed species, the CDFW may authorize take through issuance of an Incidental Take Permit (ITP) pursuant to Section 2081 of the California Fish and Game Code. Section 2081 requires preparation of mitigation plans in accordance with published guidelines that require, among other things, measures

to fully mitigate impacts to State listed species. The CDFW exercises authority over mitigation projects involving State listed species, including those resulting from CEQA mitigation requirements. No authorization of take under Section 2081 is permitted for species listed in State statutes as Fully Protected Species. Where Fully Protected Species are involved, projects must be designed to avoid all take of the species. The CDFW cannot issue an ITP until the CEQA Lead Agency has provided documentation in the form of a Notice of Determination that the proposed project has complied with CEQA.

California Department of Fish and Wildlife–Lake and Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify the CDFW of such proposed activity. Based on the information contained in the notification form and a possible field inspection, the CDFW may propose reasonable modifications in the proposed construction as would allow for the protection of fish and wildlife resources. Upon request, the parties may meet to discuss the modifications. If the parties cannot agree and execute a Lake and Streambed Alteration Agreement, then the matter may be referred to arbitration. The CDFW cannot issue a Streambed Alteration Agreement until CEQA compliance has been achieved, usually through the CEQA Lead Agency providing documentation in the form of a Notice of Determination that the Lead Agency has complied with CEQA by preparing a negative declaration or Environmental Impact Report (EIR).

CDFW's regulations implementing the Fish and Game Code define the relevant rivers, streams, and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water" (Title 14 California Code of Regulations [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code*.[9] In making jurisdictional determinations, the CDFW staff typically rely on field observation of physical features that provide evidence of water flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically mentioned in the Fish and Game Code provisions governing Lake and Streambed Alteration Agreement, but the CDFW often asserts jurisdiction over areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

[9] California Department of Fish and Game (CDFG). 1994. A Field Guide to Lake and Streambed Alteration Agreements. Sacramento, California. November 1, 1994.

California Department of Fish and Wildlife–Fish and Game Code Section 3503, 3503.5, and 3513.

The State of California also incorporates the protection of nongame birds and birds of prey, including their nests, in Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Fish and Game Code Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs. In December of 2018, California issued new guidance specifying that State law includes "a prohibition on incidental take of migratory birds, notwithstanding any federal reinterpretation of the Migratory Bird Treaty Act" by the Department of Interior.

California Department of Fish and Wildlife–Sensitive Plant Communities

The CDFW has designated special-status natural communities which are considered rare in the region, rank as threatened or very threatened, support special-status species, or otherwise receive some form of regulatory protection. Sensitive plant communities are those natural plant communities identified in local or regional plans, policies, ordinances, regulations, or by the CDFW that provide special functions or values. Documentation pertaining to these communities, as well as special-status species (including Species of Special Concern), is kept by the CDFW as part of the CNDDB. All known occurrences of sensitive habitats are mapped onto 7.5-minute USGS topographic quadrangle maps maintained by the CNDDB. Sensitive plant communities are also identified by the CDFW on their List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities must be considered and evaluated under CEQA.

California Department of Fish and Wildlife–Species of Special Concern

The CDFW tracks species in California whose numbers, reproductive success, or habitat may be threatened. Species that may be considered for review are included on a list of "Species of Special Concern" developed by the CDFW. Even though these species may not be formally listed under the Endangered Species Act or CESA, such plant and wildlife species must be evaluated during the CEQA review of development projects, and mitigation should be developed to prevent significant impacts to such species.

California Department of Fish and Wildlife–Fully Protected Animal Species

The classification of Fully Protected was an effort by California Legislature in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Protection of Fully Protected Species is described in four sections of the Fish and Game Code (Fish and Game Code [FGC] §§ 3511, 4700, 5050, and 5515). These statutes prohibit take or possession of Fully Protected Species at any time. The CDFW is unable to authorize incidental take of Fully Protected Species when activities are proposed in areas inhabited by these species, except pursuant to an approved Natural Community Conservation Plan. Most Fully Protected Species have also been listed as threatened or endangered species under State endangered species laws and regulations. Permits may be issued for the take of Fully Protected Bird species for necessary scientific research and relocation of the species for the protection of livestock (as per California FGC § 3511(a)(1)).

California Department of Fish and Wildlife–Swainson's Hawk Nesting Survey Guidelines

For locating nesting Swainson's hawk, the CDFW recommends using the "*Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*" dated May 31, 2000. This set of survey recommendations was developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk, and thus, reducing the potential for nest failures as a result of project activities/disturbances. In summary, surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawk, as well as the nest/chicks. To meet the CDFW recommendations for mitigation and protection of Swainson's hawk, surveys should be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation with the CDFW to determine nesting buffers is required under these guidelines. The guidelines provide specific recommendations regarding the number of surveys based on when the proposed project is scheduled to begin and the time of year the surveys are conducted.

California Department of Fish and Wildlife–Special-status Native Plant Survey Protocol

For conducting botanical surveys to detect special-status plant species, the CDFW developed survey protocols identified in "*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*" dated March 20, 2018. Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special-status plants as required by law (e.g., CEQA, CESA, and the Endangered Species Act). According to the protocol, botanical field surveys should be conducted in a manner which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special-status plants or that are restricted to lists of likely potential special-status plants are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine whether they are special-status plants.

California Department of Fish and Wildlife–Staff Report on Burrowing Owl Mitigation

The CDFW issued survey protocols for conducting burrowing owl breeding and nonbreeding season surveys and pre-construction surveys in the *Staff Report on Burrowing Owl Mitigation* dated March 7, 2012.

In summary, for breeding season surveys a minimum of four survey visits shall be conducted: (1) at least one site visit between February 15 and April 15, and (2) a minimum of three survey visits, at least 3 weeks apart, between April 15 and July 15, with at least one visit after June 15. The survey shall be conducted in all portions of the project site that fit the description of habitat in Appendix A of the staff report. Surveys shall be walked in straight-line transects spaced 7 meters to 20 meters apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 100 meters, the surveyor shall scan the entire visible project area for burrowing owl using binoculars and record all potential burrows used by burrowing owl as determined by the presence of one or more burrowing owl, pellets, prey remains, whitewash, or decoration. For nonbreeding season

surveys, the methods described above for breeding season surveys shall be followed, but at least four visits shall be spread evenly and conducted throughout the nonbreeding season.

Pre-construction surveys, referred to as "take avoidance surveys" in the staff report, are intended to detect the presence of burrowing owl on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing burrowing owl that have recently moved onto the site, migrating owl, resident burrowing owl changing burrow use, or young of the year that are still present and have not dispersed. In summary, survey methodology for pre-construction surveys should be conducted no less than 14 days prior to initiating ground disturbance activities.

California Native Plant Society

The CNPS, a nongovernmental organization, has no regulatory authority but provides information that is often used by regulatory bodies. The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review, especially for those plant species including in Lists 1 and 2. The following identifies the definitions of the CNPS listings:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **Rank 2A:** Plants presumed extirpated in California but more common elsewhere.
- **Rank 2B:** Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- **Rank 3:** Plants about which more information is needed.
- **Rank 4:** Watch List: Plants of limited distribution.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site:

Goal 8 Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

Objective 8.1 Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.

Policy 8.1.1 Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.

Policy 8.1.4 Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

Objective 8.2 Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.

Policy 8.2.1 Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site, in instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Objective 8.3 Protect natural drainages and riparian corridors within the American Canyon Planning Area.

Policy 8.3.1 Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

c. Where riparian corridors are retained, they shall be protected by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy (see Policy 8.3.2).

d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible.

e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages, or corridors from built environment.

f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats (pursuant to the federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq*.) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corps of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be affected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an appropriate conservation easement or dedication.

Policy 8.3.5 Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

Policy 8.3.6 Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

Objective 8.4 Protect local vernal pools as well as the habitats of endangered species living within American Canyon's Planning Area.

Policy 8.4.1 Require that development plans incorporate all reasonable mitigation measures to avoid significantly impacting vernal pools for projects located within American Canyon's Planning Area.

Policy 8.4.2 Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.

Policy 8.4.3 Encourage activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering.

3.3.4 - Methodology

Biological Resources Report

The description of the biological setting for the property is based on field visits to the site by HBG Senior Environmental Scientist, Gary Deghi, Senior Wetland Scientist, Robert Perrera, and Wildlife Biologist, Emilie Strauss, between December of 2020 and April of 2021. In addition, HBG independently reviewed and incorporated a number of studies previously prepared for the proposed project by other consultants and conducted additional specialized studies using species experts as part of work in preparing this document.

Previously prepared biological studies pertaining to the site included an aquatic resources delineation prepared by Monk & Associates and surveys for federally listed vernal pool brachiopods conducted by both LSA Associates and Monk & Associates.[10,11,12] HBG included a habitat assessment for the federally listed threatened California red-legged frog prepared by Dr. Mark Jennings and a botanical field surveys, floristic in nature, were conducted by Dr. Brent Helm during the 2021 flowering season. These floristic surveys were conducted when the plants of interest were in bloom or otherwise visible.[13,14] Also relevant to the biological evaluation were Biological Resource Reports prepared by Monk & Associates for two separate Initial Study/Mitigated Negative Declarations (IS/MNDs) prepared by the City of American Canyon for projects with project boundaries either shared with or adjacent to the project site. These include Biological Resource Reports for the Devlin Road Extension project and the Green Island Road Reconstruction and Widening project.[15,16]

Aquatic Resources Delineation

Monk & Associates conducted an aquatic resources delineation on the project site in 2016. Field work for the delineation was conducted during the period of April 15 to May 26, 2016. Monk & Associates Biologists used the USACE 1987 Wetlands Delineation Manual in conjunction with the regional supplement for the Arid West Region to prepare this wetland delineation. A jurisdictional determination request and the Aquatic Resources Delineation Map were prepared in compliance with the USACE 2016 Minimum Standards for Acceptance of Aquatic Resources Delineation Reports and the 2016 Updated Map and Drawing Standards for the South Pacific Division Regulatory Program.[17]

[10] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[11] LSA Associates. 2016. Results of 2016 Dry Season Listed Branchiopod Surveys for the Giovannoni Property and Devlin Road/Vine Trail Extension, Napa County, California, (USFWS Reference No. 2012-TA-0388). November 23, 2016.

[12] Monk & Associates. 2017. Vernal Pool Branchiopod Surveys on the Giovannoni Property and the Devlin Road and Vine Trail Extension project site, City of American Canyon, Napa County, California. United States Fish and Wildlife Service File No. 2012-TA-0388. Prepared for United States Fish and Wildlife Service, Sacramento Field Office. March 31, 2017.

[13] Jennings, Mark. 2021. Habitat Assessment for the California Red-legged Frog at the Proposed Giovannoni Logistics project site, American Canyon, California. Prepared by Rana Resources for Huffman-Broadway Group, Inc. March 11, 2021.

[14] Helm, Brent. 2021. Protocol Level Special Status Native Plant Surveys at the Giovannoni Logistic Center Project, Napa County, California. Prepared by Helm Biological Consulting. August 9, 2021.

[15] Monk & Associates. 2018. Biological Resource Analysis, Devlin Road/Vine Trail Extension project, City of American Canyon, California. Prepared for GHD Inc., Santa Rosa, California. October 15, 2018.

[16] Monk & Associates. 2019. Biological Resources Analysis, Green Island Road Reconstruction and Widening project, City of American Canyon, California. Prepared for City of American Canyon, California.

[17] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

Vegetation, hydrology, and soils information were taken at 142 data points. Data points were mapped using a Trimble Pro-XR Global Positioning System (GPS) having sub-meter accuracy. The delineation map was made from the GPS files using ArcMap 10.2. All spatial data were projected into the California State Plane, NAD 83 coordinate system, Zone 2. Using GPS technology, the boundaries (within 30 inches) of each delineated wetland was transferred to an aerial photograph of the project site.

3.3.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study checklist that includes questions for determining whether impacts to biological resources are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA that protect biological resources (e.g., the federal CWA, the Porter-Cologne Water Quality Control Act, the Endangered Species Act and CESA, and the Natural Community Conservation Planning Act). As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project.

Additional guidance on the significance of biological resource impacts is found in CEQA Guidelines Section 15065, subdivision (a)(1), which provides that a lead agency shall find that a project may have a significant effect on the environment if "[t]he project has the potential to: . . . 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; [or]substantially reduce the number or restrict the range of an endangered, rare or threatened species[.]" The "mandatory findings of significance" are also found in the Appendix G sample Initial Study checklist, though near the end.

In light of the foregoing, the proposed project would have a significant effect related to biological resources if the proposed project would:

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 Wildlife or United States Fish and Wildlife Service.

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 Wildlife or United States Fish and Wildlife Service.

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.

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.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

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.

g) Substantially reduce the habitat of a fish or wildlife species.

h) Cause a fish or wildlife population to drop below self-sustaining levels.

i) Threaten to eliminate a plant or animal community.

j) Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

3.3.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Special-Status Species

Impact BIO-1:	**The proposed project could 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 Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

Phases 1 and 2

Special-status Plants

A determination regarding whether special-status plant species are present in proposed development areas can only be made based on systematic rare plant surveys conducted during the flowering period of target plant species. HBG retained Dr. Brent Helm of Helm Biological Consulting, a division Tansley Team, Inc., to conduct botanical surveys for the presence of special-status plant species with the potential to occur at the site. These botanical surveys utilized CDFW protocols identified in "*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*" dated March 20, 2018.

A 10-mile radius search using the CNDDB was generated to determine special-status plant species that may be near the project site. Helm Biological Consulting determined 23 special-status plant species were associated with habitats that are known to occur the project site. Helm Biological Consulting conducted botanical surveys during the spring of 2021 and survey dates were chosen based on when the special-status plants would be in bloom or otherwise visible. Field surveys for special-status plants incorporated floristic survey methods, as recommended by CDFW protocols. Floristic survey methods require identification of all plant species located on-site. Each species encountered was identified to the extent necessary to determine whether it had any legally

protected status. Floristic surveys were conducted to ensure that special-status plant species were not inadvertently overlooked because they were not targeted for surveys.

Based on the Helm Biological Consulting botanical survey results, no special-status plant species occur on the project site. Therefore, no impacts to special-status species would occur from construction of the proposed project. No mitigation is warranted for special-status plants.

Special-status Animals

Monarch Butterfly

No trees are present on the project site so there is no possibility for the presence of a monarch butterfly overwintering site at the project site. Several Biologists, including most recently Helm Biological Consulting, have studied the site or portions of the site, and none have reported the presence of milkweed plants of the genus *Asclepias*[18] that serve as the larval host plant for monarchs. No suitable habitat for monarch butterflies is found on the site, therefore, no potentially significant impacts to monarch butterflies would result from construction of the proposed project.

Vernal Pool Fairy Shrimp

LSA Inc. conducted dry season vernal pool fairy shrimp surveys in summer of 2016, and Monk & Associates, Inc. conducted wet season vernal pool fairy shrimp surveys in winter of 2016-2017. Survey methods were conducted in accordance with the USFWS revised *Survey Guidelines for the Listed Large Branchiopods (May 31, 2015).* No vernal pool fairy shrimp were observed during the dry or wet season surveys. Based upon completed surveys using these guidelines for vernal pool fairy shrimp, it is clear that the federally listed threatened vernal pool fairy shrimp does not occur on the project site. Therefore, no impacts to vernal pool fairy shrimp would result from construction of the proposed project. No mitigation is warranted for vernal pool fairy shrimp for the proposed project.

California Red-legged Frog

A habitat assessment prepared for the project site by Rana Resources found that the project site lacks habitat necessary to support the California red-legged frog. All records of the California red-legged frog from the CNDDB in the project area are from areas east of State Route (SR) 29, which forms a barrier to potential movements of the California red-legged frog onto the site. Additionally, the project site is completely isolated from all areas to the east by SR-29 by urban infrastructure, and there are no hydrologic connections with any stream channels off-site to the east of SR-29. Finally, there is no suitable breeding or rearing habitat for California red-legged frog on-site due to the shallow and ephemeral nature of the seasonal wetlands and the lack of any suitable riparian vegetation for cover. California red-legged frog do not occupy the project site, and the proposed project would have no significant impacts on California red-legged frogs. No mitigation is warranted for this species for the proposed project.

Western Pond Turtle

Suitable habitat for western pond turtle does not occur on the site due to the shallow and ephemeral nature of the seasonal wetlands, which are inundated for only about 3 to 4 months out of the year and even less in drought years. Surrounding uplands of suitable shrub/woodlands and

[18] Helm Biological Consulting. 2021. Protocol-Level Special-Status Plant Survey at the Giovannoni Logistics Center Project, Napa County, California. August 2021.

appropriate basking sites are also lacking. Western pond turtle does not occupy the project site. No impacts to western pond turtle would result from development of the proposed project. Mitigation measures for western pond turtle are not warranted for the proposed project.

Swainson's Hawk

There are no trees located on the project site, and no large trees capable of supporting nesting by Swainson's hawk in the immediate project vicinity. The non-native grasslands and seasonal wetlands and swales found on the property provide suitable foraging habitat for Swainson's hawk that may nest away from the project site. Swainson's hawk was observed foraging on the site during surveys conducted in April and May 2021. Development of the proposed project would remove some foraging area for this species. Development of the proposed project would also provide and preserve in perpetuity approximately 45 acres of open space that would include habitat currently suitable for foraging by the Swainson's hawk as indicated by the observation of a Swainson's hawk foraging in the site in spring 2021. The adjacent Napa Logistics Park Project has preserved 37 acres of grassland and wetlands in perpetuity that provides foraging habitat for Swainson's hawk. Between these two preservation areas abutting and directly adjacent to the project site approximately 82 acres of suitable habitat would be available for the Swainson's hawk. In addition there are several large open space preserves within 2 and 5 miles of the project site that combined provide approximately 2,000 acres of suitable foraging habitat. Based upon the limited number of Swainson's hawk records within a 10-mile radius of the project site, there is sufficient foraging habitat in and within the vicinity of the project site. Based upon the limited number of known Swainson's hawk to occur within a 10 mile radius of the project site and the acreage of existing foraging habitat currently protected, the proposed project would not result in significant impacts to foraging habitat directly, indirectly, or cumulatively, therefore no mitigation is warranted for Swainson's hawk foraging habitat.

Although eucalyptus and other large trees located within about 0.25 mile from the project site provide potential nesting habitat, no nesting by Swainson's hawk (or any raptor species) was noted during surveys for nesting Swainson's hawk conducted by Helm Biological Consulting in April and May 2021. If an active Swainson's hawk nest is found on or adjacent to the project site or within the area of influence of the project site (which is generally considered within 1,000 feet), the CDFW could require that project-related disturbance at active nest sites be reduced or eliminated during the period from March 1—September 15.[19] If Swainson's hawk was found to be nesting within a zone of influence during the construction period, potential impacts to this species could occur, including disturbance to nesting birds and possible mortality of adults and/or young. If the qualified Raptor Biologist[20] determines nest disturbances are anticipated to occur that could result in mortality of adults and/or young, a Fish and Game Section 2081 ITP authorization would be required. Pre-construction nesting surveys, as described in MM BIO-1a, are warranted to ensure that the proposed project will not impact Swainson's hawk. With the implementation of this mitigation

[19] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31, 2000. 4 pages.

[20] A qualified Raptor Biologist is an individual who shall have a minimum of 5 years of academic and professional experience in biological sciences and be able to recognize raptor species that may be present at and near the project site and be familiar with the foraging and nesting habits and behaviors of these species.

measure any potential impacts to nesting Swainson's hawk would be reduced to less than significant levels.

Golden Eagle

There are no trees located on the project site, and no large trees capable of supporting nesting by golden eagle in the immediate vicinity of the project site; however, the non-native grasslands and seasonal wetlands and swales found on the property provide suitable foraging habitat for golden eagle that may nest away from the project site. A single golden eagle was observed exhibiting foraging behavior on the site in spring 2021. Although eucalyptus and other large trees located within about 0.25 mile from the project site provide potential nesting habitat, no nesting by golden eagle (or any raptor species) was noted during surveys for nesting Swainson's hawk conducted by Helm Biological Consulting in April and May 2021.

As golden eagle has been known to nest in the general area of the City of American Canyon, future nesting in suitable nest trees as close as about 0.25 mile from the project site cannot be ruled out. If a golden eagle were found to be nesting within a zone of influence of the project site during the construction period, potential impacts to this species from the proposed project could occur, including disturbance to nesting birds and possible mortality of adults and/or young. Pre-construction surveys for golden eagle, as described in Mitigation Measure (MM) BIO-1b, are warranted to ensure that construction activities do not result in impacts to nesting individuals of this species. With the implementation of this mitigation measure any potential impacts to nesting golden eagle would be reduced to less than significant levels.

Northern Harrier

Suitable nesting habitat for the northern harrier (a State Designated Species of Special Concern) occurs within the non-native grasslands and seasonal wetlands and swales found within the project site. Northern harrier individuals were observed foraging over the project site during both winter and spring (breeding) seasons during surveys conducted by Helm Biological Consulting. If a northern harrier were found to be nesting on the project site during the construction period, potential impacts to this species from the proposed project could occur, including disturbance to nesting birds and possible mortality of adults and/or young. Nesting by northern harrier has not been documented on the project site, but nesting by this species at the site is possible. Pre-construction surveys for northern harrier, as described in MM BIO-1c, are warranted to ensure that construction activities do not result in impacts to nesting harriers. With the implementation of this mitigation measure any potential impacts to nesting northern harriers would be reduced to less than significant levels.

Burrowing Owl

A small number of burrowing owl have been recorded in the CNDDB within the general project vicinity, with the nearest reports from as close as about 1.7 miles north of the project site and about 2.5 miles south.[21] No burrowing owl or occupied California ground squirrel burrows were observed on the project site during a field reviews conducted by Helm Biological Consulting in December 2020 and April and May 2021 or during previous biological studies conducted by Monk & Associates, LSA

[21] California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed May 2021.

Associates, or Rana Resources. The only observed ground squirrel were from the area around the perimeter of Clark's Rocks. It remains possible that ground squirrel could establish colonies on the site in the future prior to project construction, providing new occupiable habitats for burrowing owl. As a result, future use of the site by burrowing owl cannot be ruled out. Therefore, the proposed project shall implement MM BIO-1d to ensure that no burrowing owl would be impacted by construction activities.

Tricolored Blackbird

No impact to tricolored blackbird nesting colonies would occur as a result of the development of the project site. Although tricolored nesting colonies have been documented about 0.25 mile from the project site as recently as 1993, Helm Biological Consulting has concluded that vegetative characteristics of preferred nesting habitat for tricolored blackbird does not occur at the project site. Suitable nesting habitat for tricolored blackbird does not occur within the project site, therefore, no impacts to tricolored blackbird nesting colonies would result from implementation of the proposed project.

Conclusion

Implementation of these mitigation measures would avoid the "take" of Swainson's hawk and golden eagle defined by CESA; avoid disturbing a northern harrier or burrowing owl active nest, and avoid harming a burrowing owl during the nonbreeding season if it is occupying a burrow within the project site, thus reducing potential impacts to a level considered less then significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Pre-construction surveys for Swainson's hawk shall be conducted in the project site vicinity prior to initiation of project construction activities. These pre-construction surveys shall include investigation of all potential nesting trees within a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to commencement of project construction. Surveys shall follow California Department of Fish and Wildlife (CDFW) guidelines for conducting surveys for Swainson's hawk that were developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk and reduce the potential for nest failures due to project activities and/or disturbances.

If no nesting Swainson's hawk are found during the first non-optional survey period starting March 20, then project construction may commence. If during the third surveys (April 5–April 20) Swainson's hawk are found to be nesting in the project vicinity and construction has commenced, it shall be assumed the Swainson's hawk commenced nesting and thus the Swainson's hawk are habituated to the ambient level of noise and disturbance emanating from the project site.

If Swainson's hawk are found to be nesting within 1,000 feet of the project site, a non-disturbance buffer shall be established to keep all construction activities a minimum of 1,000 feet from the nest site. The CDFW shall be consulted regarding the adequacy of the buffer established by the qualified Raptor Biologist. At that time the necessity for acquiring a Fish and Game Section 2081 Incidental Take Permit (ITP) authorization would be determined. An ITP authorization shall be required if there is a valid concern the project activities would result in the "take" of an adult Swainson's hawk, eggs, or nestlings.

No disturbance such as construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1b No more than 30 days prior to the first ground disturbance activity, pre-construction golden eagle nesting surveys shall be conducted in the project site vicinity. Pre-construction surveys shall include investigation of all potential nesting trees within a 0.5-mile radius around all project activities. If active golden eagle nests are identified within any trees within a 0.5-mile radius of the project site, a qualified Raptor Biologist shall establish a protection buffer at a minimum of 1,000 feet that is adequate to ensure noise or activity from the proposed project would not cause nest disturbance or young or adult bird mortality. Buffer zones may vary in size as some golden eagles are more acclimated to disturbance than others. Size of buffer zone may be modified by the qualified Raptor Biologist considering the type of construction activity that may occur and the behavioral factors and extent that golden eagle may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young golden eagles have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1c Prior to ground disturbance, a pre-construction nesting survey shall be conducted for northern harrier if construction is scheduled during the nesting season (February 1 through September 1). To determine whether northern harrier is nesting on-site, a qualified Raptor Biologist(s) shall conduct walking transects through the project site grassland habitat searching for nests. An active northern harrier nest must be protected by implementing a minimum 500-foot radius buffer zone around the nest marked with orange construction fencing. If an active nest is located outside of the project site, the buffer shall be extended onto the project site and demarcated where it intersects the project site. Size of buffer zone could be modified considering the type of construction activity that may occur, physical barriers between the construction site and active nest, and the behavioral factors and extent that northern harrier may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the

nesting cycle is otherwise determined to be complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1d Prior to any ground disturbance, pre-construction surveys for burrowing owl shall be conducted. The pre-construction surveys shall be conducted within 2 weeks prior to the onset of any ground-disturbing activities. Surveys shall be conducted by a qualified Biologist following California Department of Fish and Wildlife (CDFW) 2012 staff report survey methods and Biologist qualifications to establish the status of burrowing owl on the project site.

- If burrowing owl are found to occupy the project site during the nonbreeding season (September 1 to January 31), occupied burrows shall be avoided by establishing a no-disturbance buffer zone a minimum of 100 feet around the burrow. Buffers may be adjusted to address site-specific conditions using the impact assessment approach described in the CDFW 2012 staff report. If a qualified Raptor Biologist determines the location of an occupied burrow/s may be impacted even with a 100-foot buffer, or the burrow(s) are in a location(s) on the project site where a buffer cannot be established without preventing the proposed project from moving forward, then a passive relocation effort may be instituted to relocate the individual(s) out of harm's way pursuant to a Burrowing Owl Exclusion Plan prepared in accordance with the CDFW 2012 staff report.
- If burrowing owl are found to be present during the breeding season (February 1 to August 31), the proposed project ground-disturbing activities shall follow the CDFW 2012 staff report recommended avoidance protocol whereby occupied burrows shall be avoided with a no-disturbance buffer.

Level of Significance After Mitigation

Less than significant impact.

Sensitive Natural Communities or Riparian Habitat

Impact BIO-2:	**The proposed project could 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 Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

Phases 1 and 2

The proposed project development east of Devlin Road would impact approximately 0.496 acre of palustrine emergent wetlands and the proposed Phase 2 project west of Devlin Road would impact approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools for a total of 3.70 acres of wetland impacts. Plans for wetland mitigation, including the preservation of an approximately 45-acre Wetland Preserve to include existing 7.58 acres of seasonal wetlands and 0.13 acre of vernal pools as well as established/created seasonal wetlands and vernal pools intended to offset wetland impacts of buildout development of the project site. To offset the loss of the 0.496 acre of seasonal

wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland or vernal pool area, the applicant shall establish/create 0.992 acre of seasonal wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and of 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.

The portion of the project site along the northern boundary contained within the confines of No Name Creek would be subject to the regulatory jurisdiction of the CDFW under Fish and Game Code Section 1602. As the area of No Name Creek is contained within the approximately 45-acre Wetland Preserve, no impacts to the palustrine emergent wetland swale/seasonal wetland associated with No Name Creek would occur from either Phase 1 proposed project in the area east of Devlin Road or Phase 2 project west of Devlin Road. No impacts would occur to areas that would be subject to CDFW jurisdiction under Fish and Game Code Section 1602, therefore, there would be no requirement to obtain a Streambed Alteration Agreement from the CDFW.

Conclusion

Implementation of these mitigation measures would offset permanent impacts to the palustrine emergent wetlands and vernal pools and ensure there is no-net loss of wetland area, thus reducing potential impacts to a level considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-2 To offset the loss of the 0.496 acre of seasonal wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of palustrine emergent wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.

Level of Significance After Mitigation

Less than significant impact.

Wetlands and Jurisdictional Features

Impact BIO-3:	**The proposed project could 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.**

Impact Analysis

Phases 1 and 2

Region 1 of the USFWS developed the "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" dated December 15, 2005. The recovery plan covers 33 species of plants and animals that occur exclusively or primarily within a vernal pool ecosystem in California and southern Oregon. The recovery plan goals include protecting and conserving intact vernal pools and vernal pool complexes within the recovery planning area to maintain viable populations of listed species and species of concern and prevent additional threats from emerging over time. The recovery plan includes designated "core" areas that are specific sites necessary to recover these endangered or threatened species or to conserve the species of concern addressed in this recovery plan.

The project site is near two core areas referred to as the "Napa River Core Area." One core area is located approximately 2.5 miles northeast of the project site at the Highway 12 and 121 interchange. The second Napa River Core Area is adjacent to the project site near the northwest boundary of the Wetland Preserve area.

The project site itself is not within a core area and does not support vernal pool complexes that support plants and animals targeted in the USFWS recovery plan, therefore no direct adverse impacts to the Napa River Core Area would occur as a result of implementation of Phases 1 and 2. Phase 1 of the proposed project would preserve, in perpetuity, approximately 45 acres along the northern boundary. The 45-acre Wetland Preserve supports 7.58 acres of seasonal wetlands and 0.13 acre of vernal pools but would also include establishment/creation of approximately 3.56 acres of seasonal wetlands and 1.13 acres of vernal pools. Once the 45-acre Wetland Preserve is placed under a conservation easement, the additional wetlands are established/created, and an endowment to manage the land is funded, this 45-acre Wetland Preserve may provide beneficial impacts, long-term in duration, to the adjacent Napa River Core Area and recovery plan by providing protected wetland and vernal pool habitat within close proximity to the Napa River Core Area that may be suitable, once wetlands are established/created for the listed species and species of concern addressed in the recovery plan.

Based on the project site being located outside of the Napa River Core Area, the absence of listed species targeted in the recovery plan, and the proposed preservation of the Wetland Preserve, no adverse impacts to the Napa River Core Area would occur from construction of the proposed project. No mitigation is warranted for the Napa River Core Area.

Phase 1

Development of Phase 1 of the proposed project within the area east of Devlin Road would result in impacts to wetlands subject to USACE jurisdiction as a water of the United States and subject to San Francisco Bay RWQCB jurisdiction as a water of the State. Grading activities associated with the proposed project would result in the permanent placement of fill material (soil) into 0.496 acre of palustrine emergent wetlands considered waters of the State; refer to Exhibit 3.3-3. Of this 0.496 acre of impacts to waters of the State, the USACE has determined 0.492 acre are isolated and not considered waters of the United States. Therefore, the proposed project would also impact 0.004 acre of palustrine emergent wetlands considered waters of the United States. The City of American Canyon processed a separate Nationwide Permit for impacts to 0.21 acre on the 8.3-acre project site for the Devlin Road/Vine Trail Extension project.

An enumeration of the wetland impacts within the proposed project development is detailed in Table 3.3-1.

Table 3.3-1 Wetland Impacts

Isolated Wetland (IW)	Square Feet/Acres
IW-2	97/0.002
IW-3	229/0.005
IW-4	3117/0.072
IW-5	17019/0.391
IW-6	935/0.022
USACE Jurisdictional Wetlands	
W-89	189/0.004
Total	**21,586/0.496**
Source: Huffman-Broadway Group, Inc. 2021.	

Grading activities would result in the permanent placement of fill material (soil) into 0.496 acre of palustrine emergent wetlands considered waters of the State under the Porter-Cologne Water Quality Control Act. Of the 0.496 acre of waters of the State, the USACE has determined 0.492 acre are isolated and not considered waters of the United States under the federal CWA, so the proposed project would also impact the remaining 0.004 acre of palustrine emergent wetlands considered waters of the United States. These impacts would require that the applicant apply for and obtain a Nationwide Permit from the USACE for discharge within 0.004 acre of wetlands under CWA Section 404 jurisdiction along with an accompanying Section 401 Water Quality Certification from the San Francisco Bay RWQCB. The applicant would also need to apply for and obtain a separate Waiver of Waste Discharge from the San Francisco Bay RWQCB for impacts to 0.496 acre of waters of the State, as described in MM BIO-3a. Exhibit 3.3-4 depicts the Wetlands Mitigation Plan.

Phase 2

The development of the remaining 85.9-acre area on the west side of the Devlin Road Extension, which consists of Phase 2 of the proposed project, would impact approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pool wetlands considered both waters of the State and waters of the United States, assuming buildout of Phase 2; refer to Exhibit 3.3-5. Impacts to approximately 3.7 acres of wetlands for a possible Phase 2 project would require that the applicant submit a separate application for an Individual Permit from the USACE to include a plan to compensate for wetland losses as well as a detailed alternatives analysis under the Section 404(b)(1) guidelines to include a detailed evaluation of both on-site and off-site alternatives for the proposed project. Such a development on the Phase 2 portion of the project site would also require a CWA Section 401 Water Quality Certification from the San Francisco Bay RWQCB for the USACE permit to be valid and would also require a Waiver of Waste Discharge Requirements for San Francisco Bay RWQCB pursuant to the Porter-Cologne Water Quality Control Act, as described in MM BIO-3b.

As described in MM BIO-3d, a detailed Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay RWQCB for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan includes the preservation of the approximately 45-acre Wetland Preserve as well as the creation of approximately 3.56 acres of palustrine emergent wetlands and 1.13 acres of vernal pools within the Wetland Preserve.

Conclusion

Implementation of these mitigation measures would offset permanent impacts in-kind to the palustrine emergent wetland and in-kind to the vernal pools and ensure there is no-net loss of wetland area, thus reducing potential impacts to a level considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-3a Prior to issuance of the Phase 1 grading permit, the project applicant shall apply for and obtain a Nationwide Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for discharge within 0.004 acre of wetlands/waters of the United States under Clean Water Act (CWA) Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for impacts to 0.496 acre of wetlands/waters of the State. To offset the loss of 0.496 acre of permanent wetland impacts and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of wetlands (2:1 ratio), prior to or concurrent with the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3b Prior to issuance of the Phase 2 grading permit, the project applicant shall apply for and obtain an Individual Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for the placement of fill material within approximately 3.7 acres of wetlands/waters of the United States under Clean Water Act (CWA) Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for the discharge of fill material within approximately 3.7 acres of waters of the State. To offset the loss of 3.7 acres of permanent wetland impacts and to ensure there is no-net loss of wetland area or permanent loss of functions and values, the applicant shall establish/create 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pools (1:1 ratio), at a minimum of 1 year prior to the start of construction, on the 45-acre Wetland Preserve. The

established/created wetlands and vernal pools shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3c Prior to issuance of the Phase 1 grading permit, a Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall address the loss of 0.496 acre of wetlands impact due to Phase 1 of the proposed project as well as the potential loss of approximately 3.7 acres of wetlands that as part of Phase 2. The Wetland Mitigation and Monitoring Plan shall include in irrevocable instrument (e.g., deed restriction or conservation easements) that shall restrict use of both the 0.992 acre of created wetlands for Phase 1 as well as approximately 3.7 acres of additional wetlands created for Phase 2. The Wetland Mitigation and Monitoring Plan shall also include a long-term endowment that would be fully funded by the proposed project to manage approximately 45-acre open space preserve and created wetlands in perpetuity. If additional wetland mitigation lands are required to compensate for wetland impacts associated with Phase 2, wetlands shall be established/created at a minimum 1:1 ratio (1 acre established/created for every acre permanently impacted) on appropriate mitigation land, approved by the RWQCB and United States Army Corps of Engineers (USACE), within the Phase 2 project site's Hydraulic Unit Code (HUC) 10 watershed. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3d Prior to issuance of the Phase 1 and Phase 2 grading permit, a Wetland Mitigation and Monitoring Plan shall be submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall be prepared in accordance with the Subpart J–Compensatory Mitigation for Losses of Aquatic Resources outlined in the California State Water Resources Control Board (State Water Board) Procedures, and in accordance with the State Water Board *Implementation Guidance* dated April 2020, and in accordance with the United States Army Corps of Engineers (USACE) Compensatory Mitigation Rule (33 Code of Federal Regulations Part 332)

The basic objective of the Wetland Mitigation and Monitoring Plan is to ensure that project wetland impacts, and compensatory mitigation proposed to offset the wetland impacts, shall provide a no-net-loss of area of wetlands, and wetlands established/created shall be in-kind to the wetlands impacted. In summary, the Wetland Mitigation and Monitoring Plan shall at a minimum:

1. Preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of vernal pools within the 45-acre Wetland Preserve.

2. Establish within the Wetland Preserve approximately 0.992 acre of seasonal wetlands in advance of or concurrent with implementation of Phase 1 impacts to 0.496 acre of palustrine emergent wetlands at a 2:1 ratio.
3. Establish within the Wetland Preserve approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools in advance of implementation of future Phase 2, assuming Phase 2 is built out, to address the potential maximum losses of approximately 3.7 acres of wetlands that may occur.
4. Provide financial assurances to ensure a high level of confidence that the compensatory mitigation shall be successfully completed, in accordance with applicable performance standards.
5. Design ecological performance standards to assess whether the Wetland Mitigation and Monitoring Plan is achieving the overall objectives, so that it can be objectively evaluated to determine whether it is developing into the desired resource type (vernal pool, seasonal wetland e.g.), and attaining any other applicable metrics such as acres, number of native plant species, water saturation and/or ponding depth etc.
6. Monitor the site for a duration necessary to determine whether the Wetland Mitigation and Monitoring Plan is meeting the performance standards. Established palustrine emergent wetlands and vernal pools typically develop quickly on soils with clay restrictive horizon. The 45-acre Wetland Preserve does have a clay restrictive layer approximately 8–18 inches below the surface therefore a 5-year monitoring period would be sufficient to determine whether performance standards are met. This monitoring period may be extended if performance standards are not met due to how the wetlands were constructed or natural events such as severe droughts.
7. Protect the approximately 45-acre Wetland Preserve in perpetuity using a conservation easement, and provide an endowment sufficient to fund the Long-Term Management Plan.
8. An overall assessment of the condition of the wetlands that shall be permanently impacted by the proposed project shall be conducted using the California Rapid Assessment Method (CRAM) for depressional wetlands, or a hybrid approach based on CRAM. Each similar wetland type that may be impacted shall be assessed to describe the floristic community and record the native and non-native dominant plants within the vernal pool and palustrine emergent wetlands. Physical structure such as topographic complexity and physical features that may provide habitat for aquatic species (e.g., boulders, woody debris etc.) shall be recorded and used to design the created/established wetlands. The purpose of this assessment is to ensure the design of the wetlands shall provide habitat that is similar to the wetlands being impacted to ensure the impacted wetlands are mitigated in-kind.

Performance Standards

Performance Standards shall include at a minimum the following:

Years 1, 2, 3, 4 and 5 Performance Standards for Wetland Hydrology

Each year wetland hydrology shall be measured during the winter when surface and/or subsurface hydrology would be observable. A minimum of 1 data point shall be taken in each of the established/created wetlands. In addition, wetland hydrologic indicators shall be recorded each spring during the vegetation monitoring period.

Year 1:

Performance standard would be met for Year 1-5 if:

- The created wetlands remain inundated to a minimum depth of 0.5 inch or greater for at least 7 days and/or saturated for at least 14 days and/or at least one primary or two secondary wetland hydrology indicators listed in the *Arid West Region Wetland Determination Data Forms* are recorded.

Contingency Measures:

If the annual performance standard is not being met for any given monitoring year the Permittee shall prepare an analysis of the cause(s) of failure and, if determined necessary, implement remedial action. If the Plan Area has not met the performance standard, the Permittee's maintenance and monitoring obligations shall continue until the RWQCB and CDFW give final project confirmation. Remedial action may include re-grading to achieve wetland hydrology, which would improve hydric soil formation.

Years 1, 2, 3, 4, and 5 Performance Standards for Increase in Colonization of Wetland Vegetation

Each year during the spring or early summer wetland vegetation cover shall be measured by conducting a site visit and recording absolute cover and dominant plant species observed within the wetland buffer area. A minimum of 1 data point shall be taken in each of the established/created wetlands. The colonization of wetland vegetation shall be measured by determining overall absolute plant cover values each year. This shall be accomplished by measuring absolute cover values within a 5-foot radius sample plot at each data point. Performance Standards for each monitoring year are listed below.

Year 1:

Performance standard would be met for Year 1 if:

- At least one hydrophytic plant species colonizes the established/created seasonal wetlands and vernal pools; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 5 percent or greater.

Year 2:

Performance standard would be met for Year 2 if:

- At least one hydrophytic plant species colonizes the established/created seasonal wetlands and vernal pools; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 10 percent or greater.

Year 3:

Performance standard would be met for Year 3 if:

- At least two hydrophytic plant species colonizes the established/created seasonal wetlands;
- At least two native hydrophytic plant species colonizes the established/created vernal pools and at least one is a vernal pool habitat indicator species; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 20 percent or greater and comprised of native and naturalized species.

Year 4:

Performance standard would be met for Year 4 if:

- At least two hydrophytic plant species colonize the established/created seasonal wetlands.
- At least two native hydrophytic plant species colonizes the established/created vernal pools and at least one is a vernal pool habitat indicator species.
- The average absolute cover of wetland vegetation within an established/created seasonal wetland and vernal pool is 30 percent or greater.
- Invasive wetland plant species do not comprise greater than 5 percent of the total absolute cover. Invasive plants shall be defined as species rated as “high” by California Invasive Plant Council (Cal-IPC).

Year 5:

Performance standard would be met for Year 5 if:

- At least two hydrophytic plant species documented during the CRAM assessment for the palustrine emergent wetlands impacted on the Phase 1 project site colonize the established/created seasonal wetlands.
- At least two native vernal pool habitat indicator species documented during the CRAM assessment for the vernal pool on the Phase 2 project site colonizes the established/created vernal pools.
- The average absolute cover of wetland vegetation within the established/created seasonal wetland (non-vernal pool wetlands) is 40 percent or greater; and the average absolute cover of wetland vegetation within the established/created vernal pools is 40 percent or greater of which greater than 50 percent of the vegetation cover consists of two or more dominate native vernal pool habitat indicator plants.

- Invasive wetland plant species do not comprise greater than 5 percent of the total absolute cover. Invasive plants shall be defined as species rated as "high" by Cal-IPC.

Contingency Measures:

If the annual performance standard is not being met for any given monitoring year the Permittee shall prepare an analysis of the cause(s) of failure and, if determined necessary, implement remedial action. Remedial action may include hydroseeding with native species, or addition of supplemental topsoil or mulch to promote growth.

Year 5 No-Net-Loss Performance Standard for Phase 1 Impacts

Performance standard would be met for Year 5 when;

- A wetland delineation is performed and verified by the USACE and confirms a minimum of 0.992 acre of wetlands have been established/created within the Wetland Preserve.

Year 5 No-Net-Loss Performance Standard for Phase 2 Impacts

The Phase 2 no-net-loss performance standard would be measured when an application for the Phase 2 project is submitted to the RWQCB and USACE, and the Phase 2 project is approved. Once Phase 2 has been approved by the RWQCB and USACE, this performance standard may be modified depending on the level of wetland impacts authorized by the RWQCB and USACE, meaning this performance standard may decrease if the wetlands impacted for Phase 1 are less than 3.7 acres.

Performance standard would be met for Year 5 when;

- A wetland delineation is performed and verified by the USACE and confirms a minimum of 2.57 acres of seasonal wetland and 1.13 acres of vernal pools have been established/created within the Wetland Preserve.

Year 5 Long-Term Protection and Long-Term Funding

Performance standard would be met for Year 5 once:

- The Wetland Preserve has been placed under a conservation easement; and
- A long-term financing mechanism (e.g., non-wasting endowment, trusts, contractual arrangement etc.) to fund implementation of the long-term management of the Wetland Preserve has been secured.

Level of Significance After Mitigation

Less than significant impact.

Fish and Wildlife Movement Corridors

Impact BIO-4:	**The proposed project could 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.**

Impact Analysis

Phases 1 and 2

Although a number of wildlife species, including a variety of bird species that potentially include special-status species, were observed on the property during field surveys, neither the development of the proposed project would result in significant impacts to movement of any native resident or migratory fish or wildlife species, migratory wildlife corridors or use of wildlife nursery sites on the site. Mitigation measures to address impacts to sensitive habitats, most notably seasonal wetlands and vernal pools, are included herein that include the preparation and implementation of a detailed Compensatory Wetland Mitigation Plan. The site design includes the preservation of the approximately 45-acre Wetland Preserve that will preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of existing vernal pools but would also include creation of approximately 3.56 acres of additional seasonal wetlands and 1.13 acres of vernal pools.

Any species of fauna that may be displaced during preparation of the site for development of the proposed project should find nearby available habitats, including habitats within the approximately 45-acre Wetland Preserve or adjacent and adjacent 37-acre preserve for the Napa Logistics project on the adjacent property. The major wildlife corridor along No Name Creek will remain unaffected as the entirety of No Name Creek shall be incorporated into the Wetland Preserve. The proposed project would not result in substantial change in animal populations at the site, nor would it cause a fish or wildlife population to drop below self-sustaining levels.

Nesting Birds

Nesting bird species protected by the federal MBTA or California Fish and Game Code could be impacted during project construction. Work related to construction involving the removal of vegetation during the February 1 to August 1 breeding season of birds could result in mortality of nesting avian species if they are present. Many species of raptors (birds of prey) and non-raptors are sensitive to human incursion and construction activities, and it is necessary to ensure that nesting bird species are not present in the vicinity of construction sites. Therefore, the proposed project shall implement MM BIO-4 in order to reduce any potential impacts to nesting birds to less than significant levels.

Water Quality

Construction activities for Phase 1 of the proposed project will occur in within 0.496 acre of wetlands subject to State jurisdiction and in close proximity to areas within the upper reaches of No Name Creek. Construction of Phase 2 may affect 3.7 acres of wetlands, including vernal pools, near No Name Creek. However, water quality impacts with implications to use of No Name Creek as a wildlife movement corridor would not be significant for several reasons. The requirement for the implementation of a SWPPP, with identification of proper construction techniques and BMPs, would be required and would provide assurance that water quality of nearby waterways is not affected by on-site construction activities. In particular, silt fence and straw wattles would be installed along portions of the project site to maintain levels of water pollutants migrating off-site. In addition, vegetation would only be cleared from the permitted construction footprint. Areas cleared of vegetation, pavement, or other substrates should be stabilized as quickly as possible to prevent erosion and runoff.

Grading, excavation, placement of fill material, and other ground-disturbing activities associated with construction activities within the project site would not promote erosion that would allow elevated levels of sediment to wash into aquatic areas downstream, including No Name Creek, where such pollutants could result in potential impacts to fish and wildlife resources. Indirect impacts to resident animal populations in downstream areas would not result from the proposed project due to elevated turbidity levels from increased sedimentation or increases in other contaminants in stormwater runoff.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-4 If construction occurs during the breeding season of migratory and resident birds (February 1 to August 31), a qualified Biologist shall conduct a pre-construction breeding bird survey in areas of suitable habitat within 15 days prior to the onset of construction activity. Nesting bird surveys shall cover the proposed project footprint and adjacent areas. If bird nests are found, appropriate buffer zones shall be established around all active nests to protect nesting adults and their young from direct or indirect impacts related to project construction disturbance. Size of buffer zones shall be determined per recommendations of the qualified Biologist based on-site conditions and species involved. At a minimum a 1,000-foot buffer shall be established for nesting Swainson's hawk and golden eagle; 500-foot buffer for nesting northern harriers; 250-foot buffer for nesting accipiters; and minimum 50-foot buffers shall be established for nesting passerines and all other non-raptor or passerine nesting birds. Buffer zones shall be maintained until it can be documented that either the nest has failed, or the young have fledged.

Level of Significance After Mitigation

Less than significant impact.

Local Policies or Ordinances

Impact BIO-5:	**The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

Phases 1 and 2

No trees are present on the project site and, therefore, no tree removal would occur. The proposed project would not conflict with any local policies related to protection of natural resources.

All work for the proposed project would take place consistent with biological requirements of the General Plan and Zoning Ordinance of the City of American Canyon. The Biological Resources Report provides the detailed assessment of biological resources required by General Plan Policies 8.1.1 and 8.1.4. Studies of sensitive biological resources have been either conducted by HBG as part of the attached Biological Resources Report or were conducted by other consultants and independently

reviewed and incorporated into the Biological Resources Report, consistent with General Plan Policy 8.2.1. Studies conducted by HBG include a protocol Phase 1 Habitat Assessment for the federally listed threatened California red-legged frog, surveys for State listed threatened Swainson's hawk and rare plant surveys conducted by Dr. Brent Helm during the 2021 flowering season. Studies conducted by others include wet and dry season protocol surveys for the federally listed threatened vernal pool fairy shrimp and rare plant surveys. The proposed project results in impacts to palustrine emergent wetlands and vernal pool wetlands and the applicant has prepared a conceptual plan to mitigate for these wetlands consistent with General Plan Policy 8.3.1.a, which requires the development plan to consider the nature of existing biological resources and all reasonable measures to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones; General Plan Policy 8.3.1.h, which requires in summary developments shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats by replacement on an in-kind basis and such replacement should occur on the original development site, whenever possible, and; General Plan Policy 8.4.3, which encourages activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering. The wetland mitigation would be accomplished through establishment of an approximately 45-acre Wetland Preserve within the project site to include preserving 7.58 acres of existing seasonal wetlands and 0.13 acres of vernal pools and establishment/creation of an additional approximately 3.56 acres of seasonal wetlands and 1.13 acres of vernal pools to compensate in-kind for permanent impacts to seasonal wetlands from the proposed project.

Level of Significance Before Mitigation

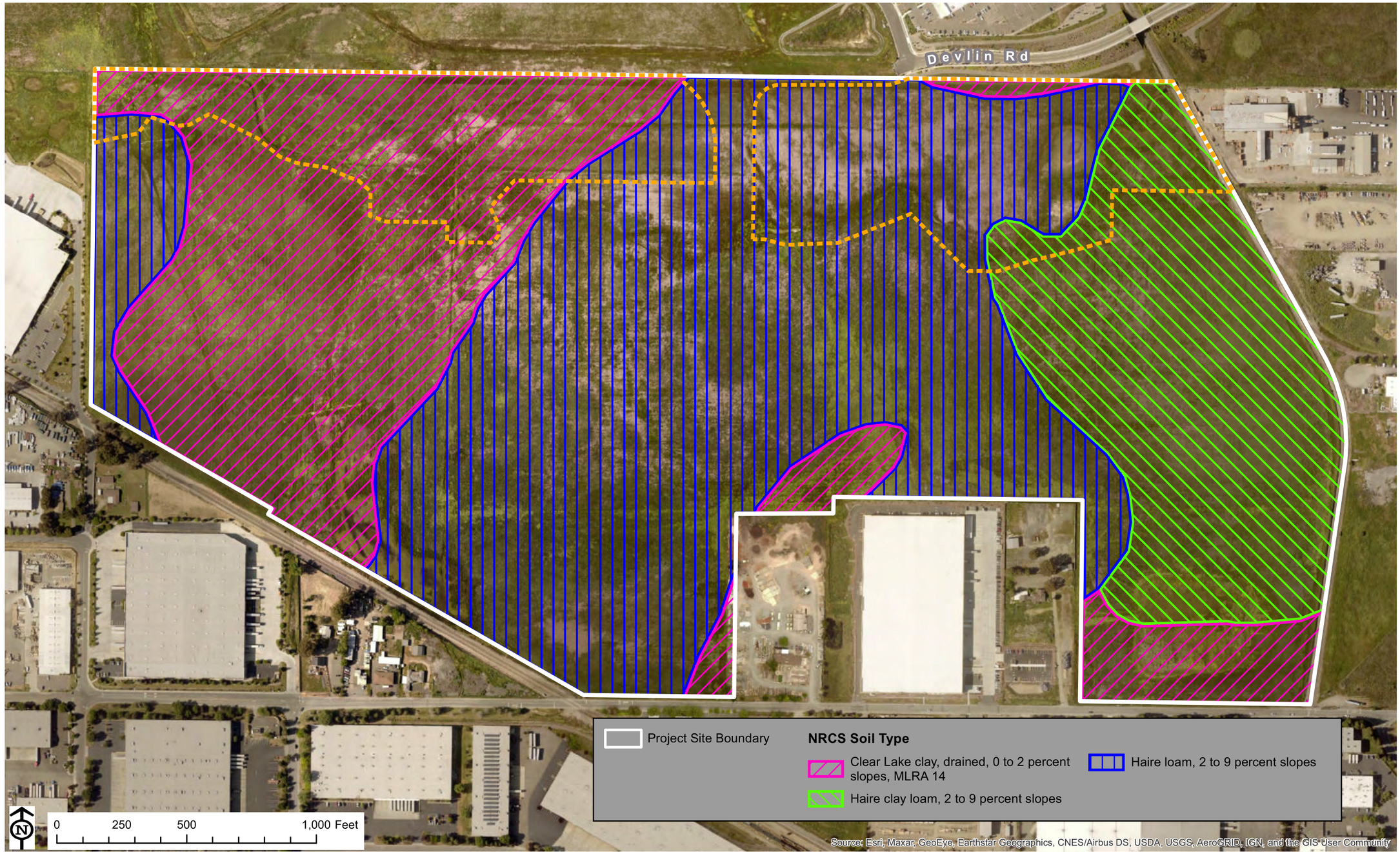
Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.



Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-1
Soils Map

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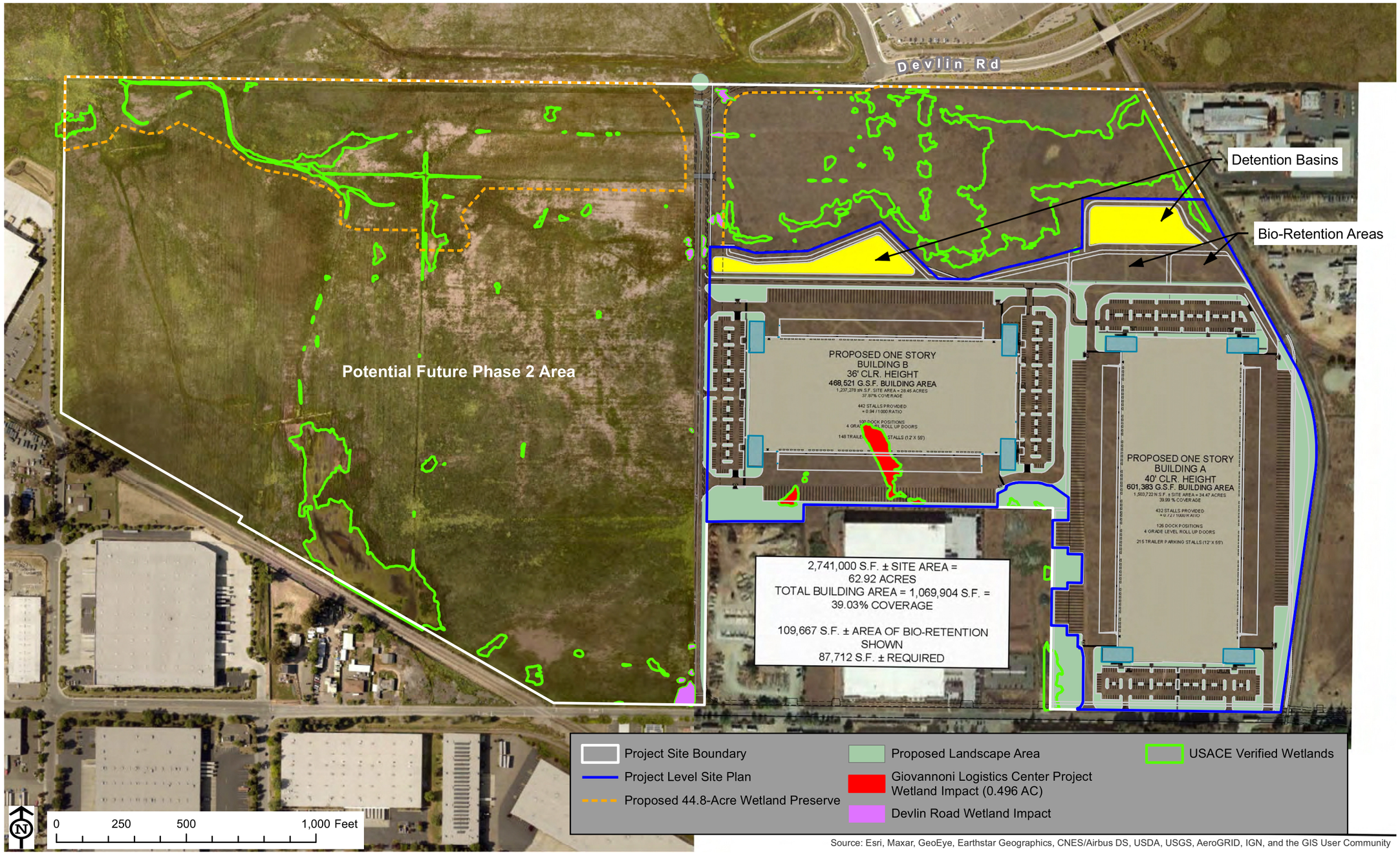
Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants. Imagery Source: Maxar.

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Exhibit 3.3-2
Plant Communities

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-3
Phase 1 Wetland Impacts

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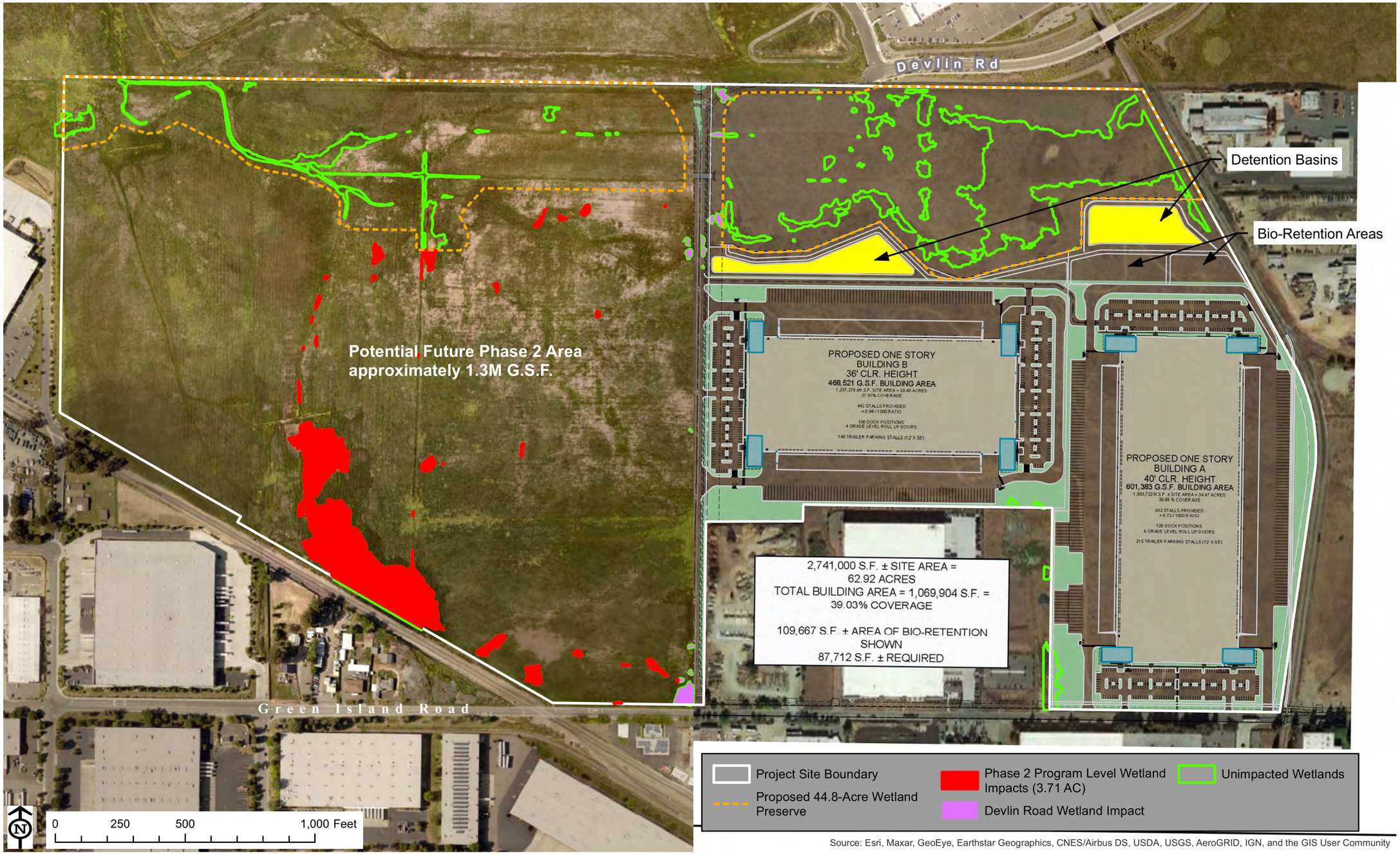


Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-4
Wetland Mitigation Plan

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Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-5
Phase 2 Wetland Impacts

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3.4 - Cultural Resources and Tribal Cultural Resources

3.4.1 - Introduction

This section describes the existing cultural and tribal cultural resources setting and potential effects that may result from project implementation on the site and its surrounding area. The descriptions and analysis in this section are based on information provided by the Native American Heritage Commission (NAHC), a records search conducted at the Northwest Information Center (NWIC), archival research, and a pedestrian survey, as presented in the Phase I Cultural Resource Assessment (Phase I CRA) prepared for the proposed project are included in confidential Appendix D. Recommendations provided in the Phase I CRA pertaining to mitigation of potential impacts to cultural resources are also addressed in this section.

3.4.2 - Environmental Setting

Overview

The term "cultural resources" encompasses historic, archaeological, tribal cultural resources, and burial sites containing human remains. Below is a brief summary of each component:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old.
- **Archaeological Resources**: Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Tribal Cultural Resources:** Tribal Cultural Resources (TCRs) include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred. Native American burial sites are also considered TCRs of cultural value to one or more California Native American Tribe.

Cultural Setting

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.[1,2,3,4,5]

[1] Beardsley, R.K. 1948. Cultural Sequences in Central California Archaeology. American Antiquity 14:1–28.
[2] Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.
[3] Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park. Stanford University Press.
[4] Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.
[5] Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.

Prehistoric Background

In general, archaeological research in the greater San Francisco Bay Area has focused on coastal areas, where large shellmounds were relatively easily identified on the landscape. This research and its chronological framework, however, is relevant to and has a bearing on our understanding of prehistory in areas north of the San Francisco Bay, including modern American Canyon, Napa County.

Like many California cultural chronologies, the greater San Francisco Bay Area has a complex history. As synthesized by Milliken et al., three major chronologic frameworks exist for the Bay Area: an Archaic-Emergent temporal structure; the Central California Taxonomic System (CCTS) and a "hybrid system" that is utilized using the overarching CCTS scheme, while further demarcating time depth/period changes regionally, as used in the Archaic-Emergent temporal structure.[6] Specifically, regional cultural patterns and phases are further defined within the San Francisco Bay Area by Dating Scheme D, which utilizes dated Olivella shell bead horizons. Milliken et al. used the term "bead horizons" to define the passage of short periods of time by the shifts in the trade of specific bead types throughout the Bay Area. This builds on Fredrickson, who proposed a chronology for the broader San Francisco Bay Area region. Fredrickson's chronology is based on material patterns and includes the Windmiller Pattern (2500 before Common Era [BCE]–1,000 BCE), Berkeley Pattern (2000 BCE–500 Common Era [CE]) and the Augustine Pattern (500 CE–1880 CE).[7] The Windmiller Pattern is typified by a hunter-gatherer subsistence pattern, which included the exploitation of wild plants, game, and fish. Typical artifacts include clay balls, fishing hooks, fishing spears and ground stone tools. Artifacts from the Berkeley Pattern era reflect an increasing reliance on acorns, as mortars and pestles become more prolific. The Augustine Period was a period of increasing social complexity. Acorns continued to be the dominant food source and settlement patterns reflected an increasing sedentary lifestyle.[8]

Following the hybrid system proposed by Milliken et al., The Lower Archaic, 8000–3500 BCE, is typified in the Bay Area by a forager and gatherer lifestyle, as evidenced by the prevalence of milling slabs, hand stones, and large, wide-stemmed and leaf-shaped projectile points. The Middle Archaic, 3500-500 BCE, saw an increase in the presence of ground stone and cut shell beads, indicating that groups in the Bay Area were transitioning to a more sedentary lifestyle; interregional trade was increasing, and as the beads were found in mortuary contexts, that symbolism was becoming a regional identifier. The Early Upper Archaic, 500 BCE to 430 CE, saw a shift away from cut beads to Olivella beads, and along the Bay, a new emphasis on Haliotis ornaments and bone tools, with net sinkers largely disappearing from assemblages. The Late Upper Archaic, 430 to 1050 CE, further defined by the bead phases M1–M4, is another time of transition, as saucer-shaped Olivella beads disappear from the record and Olivella saddle beads became dominant. The appearance of the saddle shaped Olivella beads coincides with the appearance and increase in Meganos complex dorsal extended burials. The Lower Emergent Period, 1050 to 1550 CE, is characterized by increasing complexity as beads were being produced for collectors as opposed to being produced primarily as mortuary items. Sedentism and increasing social stratification is evidenced by settlement patterns

[6] Milliken, Randall, et.al. 2007. Punctuated Culture Change in the San Francisco Bay Area, In Prehistoric California: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 99–124. AltaMira Press.

[7] Frederickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

[8] Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.

and mortuary practices. The Terminal Late Period saw change in the North Bay, as clamshell disk beads became prevalent, along with the toggle harpoon, hopper mortar, plain corner-notched arrow-sized projectile points, and magnesite tube beads; however, this was not the case in the South Bay. By 1650 CE, only Olivella-lipped and spire-lopped beads were present.[9]

Settlement patterns north of San Francisco Bay have varied over time. The currently accepted understanding of settlement patterns in this area is that a foraging and hunter-gatherer lifestyle centering on lacustrine resources remained dominant in the region until the Lower to Middle Archaic. At this point, there was a shift from foraging lacustrine resources to developing semi-permanent villages near marshes and grasslands, in order to gather those specific resources. This was followed by a shift to foragers residing in residential camps, with more consistent settlement occurring in "collector villages" during the Upper Archaic. By the Emergent Period, collectors were living in semi-permanent villages in oak woodlands, which residential camps were now located along marshes.

Ethnographic Background

The Patwin

At the time of European contact, the project vicinity was primarily occupied by the Patwin Tribe of California Native Americans. The Patwin occupied the southwest Sacramento Valley from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays, and from the lower hills of the eastern North Coast Ranges to the Sacramento River. Patwin territory extended approximately 40 miles east to west and 90 miles north to south. Based primarily on linguistic variation, the Patwin are the most southern division of the Wintuan population, who are members of the Penutian linguistic stock. Distinction is made between the Hill and River Patwin. Hill Patwin had villages located in valleys along the hills of the Vaca Mountains and Coast Ranges with populations concentrated in Indian, Bear, Capay, Cortina, Long, and Napa valleys. In general, the River Patwin occupied the west banks of the lower Sacramento River below the Feather River as well as the lower reaches of Cache and Putah creeks in the Sacramento Valley.[10] The Hill Patwin villages of Napato and Tulukai lie in close proximity to the project area, and their place names remain part of the regional landscape to this day.

Patwin political organization was centered on the tribelet, which consisted of a primary village with smaller satellite villages governed by a head chief. Tribelets were autonomous and differed from each other with minor cultural variations. The economic and ceremonial activities of each village were administered by a chief whose position was typically passed on patrilineally although some chiefs were chosen by village elders. The chief administered subsistence ventures, such as hunting and gathering expeditions, and served as the primary resource distributor.[11]

The Patwin subsistence base varied with the seasons and included gathering seeds and plant resources on the plains, netting migratory waterfowl in the tule marshes, and netting salmon and other fish in the rivers and streams. Acorns were a staple in the Patwin diet and were obtained from

[9] Milliken, Randall, et.al. 2007. Punctuated Culture Change in the San Francisco Bay Area, In Prehistoric California: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 99–124. AltaMira Press.
[10] Cook, S.F. 1976. The Population of the California Indians 1769–1970. University of California Press. Berkeley, California.
[11] McKern, W.K. 1922. Functional Families of the Patwin. American Archaeology and Ethnology 13(7)235–258. Berkeley, California.

communally owned hill and valley oak groves. The Patwin stored acorns in granaries as insurance against famine in poor harvest years. Ethnographic reports indicate the Patwin obtained large game such as deer, tule elk, and antelope by using nets or shooting with bows and arrows. Fish resources were of particular importance to the River Patwin and included perch, sturgeon, salmon, sucker, trout, pike, and other riverine species such as mussels and turtles, which were caught with bone fishhooks, nets, weirs, and seines.[12]

The Patwin trade system included various resources that were exchanged with the Wappo, Nomlake, Southeastern Pomo, and Hill Patwin. The River Patwin obtained obsidian from sources to the west and east. Initially, finished shell beads were obtained from coastal tribes, but later, the River Patwin traded for whole shells from the Pacific Coast and produced the beads themselves. Relationships with nearby tribes and other Patwin tribelets were not always friendly. Patwin relations with Napa Valley groups were strained by provocations primarily incited by poaching; subsequent retaliations resulted in organized battles between individuals or groups or surprise attacks on villages.[13]

Patwin dwellings, sweathouses and dance houses were all semi-subterranean, earth-covered structures. Mortuary practices included burials in cemeteries located at one end of the village, in which the possessions of the deceased were buried with them; at some locations, property was burned near the grave. Typically, only people who died or were killed away from the village were cremated. According to a Hill Patwin informant, “the River people [Patwin] set a corpse upright, then pushed the head down, broke the back, wrapped the body in a skin, and put it in the grave.” In addition, long burial ropes constructed of hemp were wrapped around the deceased, and the River Patwin utilized temporary containers made of tule reeds.[14]

The Southern Wappo

The project site is also in close proximity to the ethnographic territory of the Southern Wappo. The Wappo language belongs to a small family of four languages, including Yuki, Coastal Yuki, and Huchnom. It is divided into five dialects distributed across two major territorial divisions. The smaller area included lands along the southern edge of Clear Lake; the larger ranged from just north of Napa, south to Geyserville and Middletown in the north. The Wappo were known to adopt words from other languages spoken in their vicinity, including Spanish names of objects with which they came into contact as a result of missionization. Of the 100 or known Wappo place names, at least one, cho*nóma, (meaning “abandoned camp”), remains in use as the probable Wappo name for the town of Sonoma.[15] Like their Pomo neighbors, the basic sociopolitical unit was the village, which was usually located on a creek or other water source. Villages included one or two sweathouses as well as houses of varying size. One of the last remaining traditional Wappo villages observed in 1870 consisted of 11 grass houses serving 21 families totaling 92 people. Each house was made of grass thatch over a framework of bent poles and had a separate entrance and smoke-hole for each family inhabiting it.

[12] Johnson, Patti, J., 1978. Handbook of North American Indians, Vol. 8: California. Washington, DC. Smithsonian Institution.
[13] Leitch, B. A. (1979). A concise dictionary of Indian tribes of North America (First Edition). N. P.: Reference Publications, Inc.
[14] McKern, W.K. 1922. Functional Families of the Patwin. American Archaeology and Ethnology 13(7)235–258. Berkeley, California.
[15] Sawyer, J.O. 1978. Wappo. Handbook of North American Indians California Volume 8. Robert F. Heizer, Editor, pp. 256–264. Washington, D.C.: Smithsonian Institution.

Basic tools consisted of wedges, axes, and fire-drills made from stones, sticks, shells, and plants. Like the Pomo, the Wappo had a tradition of creating intricately woven baskets that were both functional and decorative. This tradition, along with several surviving songs and dances attributed to the Wappo, were primary forms of artistic expression. Imported clamshell beads and magnesite cylinders served as units of exchange and items of personal adornment. Food sources included a variety of plants and creatures, including acorns, buckeye, clover, abalone, clams, turtles, salmon, ducks, rabbits, and deer.[16]

The Wappo had at least seven villages in the Geyserville area alone and estimates of their total population range from 5,000 to 8,000. Village chiefs might be elected or appointed, based on the organization of the individual village. Both men and women could occupy the role of chief, and some villages even had multiple chiefs, each with different spheres of influence, including trade, ceremonial roles, and warfare. The Wappo were generally regarded as a peaceful people, except during the Wappo-Pomo War in the early 19th Century. The Wappo apparently attacked and killed members of the Alexander Valley Pomo who had carried away some Wappo supplies of acorns. The Pomo sought peace, which was granted immediately; however, the Pomo never returned to their Alexander Valley villages north of Healdsburg. The Wappo also tried to resist Spanish incursions and colonial expansion into their territories, but like the Pomo, their numbers were decimated by smallpox, hostility from the Mexican Army, and later by Euro-American settlements in the 1850s.

Historic Background

The Spanish Period (1769-1821)

Spanish exploration into Suisun Bay and into the Central Valley dates back to the late 1700s. Spanish mission records indicate that by 1800, Patwin inhabitants at Aguastos, the south-central area, and other villages were being taken to Mission Dolores (San Francisco de Asis), and that Mission Sonoma (San Francisco Solano), built in 1823, was baptizing Patwin tribal members until secularization of the missions in 1832-1836. Many Native Americans were not willing convert. There are numerous accounts of neophytes fleeing the missions, and a series of “Indian Wars” broke out when the Spanish tried to return them to the missions.[17]

The Mexican Period (1821-1848)

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change actually occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. Anglo-American settlers began to arrive in Alta California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to

[16] Sawyer, J.O. 1978. Wappo. Handbook of North American Indians California Volume 8. Robert F. Heizer, Editor, pp. 256–264. Washington, D.C.: Smithsonian Institution.

[17] Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, Arizona.

receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-natives and 10,000 natives. However, these estimates have been debated. Cook suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.[18]

During this period, General Mariano Guadalupe Vallejo assumed authority of Sonoma Mission and established a friendly relationship with the Native Americans who were living there. In particular, Vallejo worked closely with Chief Solano, a Patwin who served as Vallejo's spokesperson when problems with Native American tribes arose. In 1843, Governor Manuel Micheltorena gave General Vallejo the 84,000-acre Soscoe land grant of Rancho Suscolto, which included the present-day Vallejo.

The American Period (1848–Contemporary)

During this period, and prior, Native American populations were declining rapidly because of an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company, led by John Work, traveled down the Sacramento River, unintentionally spreading a malaria epidemic to Native Californians. Four years later, a smallpox epidemic decimated local populations, and it is estimated that up to 75 percent of the native population died.[19]

After the upheaval of the Bear Flag Revolt in 1846, and the result of the Treaty of Guadalupe Hidalgo in 1848, California became a United States territory. In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the California Gold Rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire State. By late 1848, approximately 4 out of 5 men in California were gold miners.

By 1864, California's Gold Rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the gold rush, people in towns such as Jackson, Placerville, and Sonora turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains.

Local History Napa County

European settlement in the Napa area began with the 1820 establishment of the Sonoma Mission and General Mariano Vallejo's 1838 reception of a land grant that included the Napa and Sonoma valleys. By 1848, the American population in the area had grown, and farmer Nathan Coombs laid out a town plat for Nappa City (the spelling changed to Napa by the 1870s), which served as the County seat when Napa became one of the original 27 counties of California in 1850.[20]

[18] Cook, S.F. 1976. The Population of the California Indians 1769–1970. University of California Press. Berkeley, California.
[19] Cook, S.F. 1955. The Epidemic of 1830–1833 in California and Oregon. American Archaeology and Ethnology, 43(3): 303–326.
[20] Menefee, C.A. 1873. Historical and Descriptive Sketchbook of Napa, Sonoma, Lake, and Mendocino: Comprising Sketches of their Topography, Productions, History, Scenery, and Peculiar Attractions. Napa: Reporter Publishing House.

During the mid-1850s, Napa County began to grow. While gold was being prospected in other areas of the State, Napa County became a center for silver and quicksilver mining. The County's population began to swell as pioneers, prospectors, and entrepreneurs moved in and set up residence. Two of those entrepreneurs were Edward Turner Bale and Samuel Brannan. Bale completed building the Bale Grist Mill a few miles north of Saint Helena in 1846. Brannan purchased land in the northern end of the valley at the foot of Mount Saint Helena and founded Calistoga. He began developing it as a resort town, taking advantage of the area's numerous mineral hot springs. He also founded the Napa Valley Railroad Company in 1864 to bring tourists to Calistoga from the San Francisco ferryboats that docked in Vallejo. Other settlers turned to agriculture for their livelihood, primarily raising cattle, grain, and fruit crops.[21]

Orchards and wheat gradually displaced cattle ranching as settlers' primary source of income, and the first Downtown Napa winery opened in the 1870s. While settlers initially relied on Native labor, Chinese immigrants became a more important source of labor as the Native populations declined in the later decades of the nineteenth century. Napa had a substantial Chinatown by 1886. In 1875, the State of California built the Napa State Hospital for the Insane at the southern edge of town; the City had completed with others around the State for the privilege of hosting the asylum, which brought considerable economic benefit with it in terms of public funding.

The Phylloxera louse infested Napa Valley and killed thousands of grapevines, seriously threatening the local wine industry. Many farmers replaced their grapevines with fruit trees. As discrimination against Chinese immigration climbed throughout the country in the late nineteenth century, Napa's Chinese population shrank, and farmers began to turn to Italian immigrants as a labor source.[22]

The pattern of economic and population growth established during the war continued through the end of the 1950s. Blue-collar union jobs supported the local economy; by 1960, nearly 2,600 people were employed at Basalt Rock/Kaiser Steel and Napa's smaller manufacturing plants. Residential construction remained strong; between 1950 and 1957, nearly 5,000 dwelling units were constructed in Napa County, most of which were single-family houses in or near the Napa city limits. The downtown area remained the seat of County/City government and the commercial center of Napa during the postwar period through the mid-1960s.

The City's gradual development of a new City Hall, Police Station, and Fire Station at the Downtown Civic Center represented the most significant change to Downtown Napa's built environment during this era. By 1946, the City was discussing creation of a civic center, initially identifying the former Chinatown at First Street and the Napa River as a potential site. In 1948, the City Council began planning the new City Hall and selected the location along School Street between First Street and Second Street. Between 1951 and 1962, City Hall, the Police Station, and Fire Station No. 1 were constructed at their current locations.

[21] Menefee, C.A. 1873. Historical and Descriptive Sketchbook of Napa, Sonoma, Lake, and Mendocino: Comprising Sketches of their Topography, Productions, History, Scenery, and Peculiar Attractions. Napa: Reporter Publishing House.

[22] King, N.L. 1967. Napa County, A historical Overview. Napa: Office of Napa County Superintendent of Schools.

The City of American Canyon

Located in southern Napa County, the City of American Canyon was incorporated as a city in 1992. The history of the City of American Canyon and its economy, growth, and development has been tied to the larger Napa region as a whole. The California Gold Rush brought many settlers to the region but American Canyon itself was largely devoid of gold deposits. Instead, the area was both rich in limestone and ideally suited for farming. In 1852, Simpson Thompson and his two sons established a large farm consisting of 475 acres of orchards and farmland as well as 300 acres of meadowlands for cattle grazing. In the early 1900s, the discovery of rich deposits of limestone led to the development of quarries that could produce over 2000 barrels of cement per day. However, the exploitation of usable limestone and clay meant that by 1930s, mining became economically untenable in the region. The economy of the region pivoted toward agriculture, particularly fruit orchards and the farming of wheat.[23]

However, the City's economy would shift following the Paris Wine Tasting of 1976, better known as the Judgement of Paris. In a blind tasting, a panel of expert sommeliers scored wines from Napa estates such as Heitz Cellars or Stag's Leap higher than estates that produced First Growth Bordeaux wines. Their judgement sent shockwaves around the wine industry and established Napa as a world-class wine-growing region.[24] While the region of Calistoga and St. Helena in Napa has been focused on producing top-tier wines and attracting high-end clientele, their success could not exist without the logistic support of the warehouses and distribution centers that grew up in American Canyon. These centers developed in subsequent years following the 1976 Judgement of Paris and provide the backbone for the distribution of domestic and imported wines both in the Bay Area and overseas today.[25]

3.4.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under 36 Code of Federal Regulations 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

[23] American Canyon Historical Society Volume 1 and 2. 2010. Napa County Historical Society.
[24] Taber, George. 2006. Judgement of Paris. Scribner Press.
[25] Ibid.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally-funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

(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.

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be

presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of 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 a 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.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the California Register of Historical Resources (CRHR).

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code Section 5024.1. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

Public Resources Code 5024.1(c)—Definition of a Historic Resource

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a "historical resource" as a resource that:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the Coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).

- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

Health and Safety Code Section 7050.5

Section 7050.5 of the Health and Safety code sets forth provisions related to the treatment of human remains. As the code states, "every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor" except under circumstances as provided in Section 5097.99 of the Public Resource Code. The regulations also provide guidelines for the treatment of human remains found in locations other than a dedicated cemetery including responsibilities of the Coroner.

Public Resources Code Section 5097.98

Section 5097.98 provides protocol for the discovery of human remains. It states that "when the commission receives notification of a discovery of Native American human remains from a County Coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify persons believed to be most likely descended from the deceased Native American." It also sets forth provisions for descendants' preferences for treatment of the human remains and what should be done if the commission is unable to identify a descendant.

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. Section 5097.5 defines the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands as a misdemeanor.

California Senate Bill 18—Protection of Tribal Cultural Places

California Senate Bill (SB) 18 (California Government Code § 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the

local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

California Assembly Bill 52—Effects on Tribal Cultural Resources

California Assembly Bill (AB) 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment." TCRs include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources." Under prior law, TCRs were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as previously discussed.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a TCR (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

California Public Resources Code Section 21074—Effects on Tribal Cultural Resources

AB 52 amended the CEQA statute to identify an additional category of resource to be considered under CEQA, called "tribal cultural resources." It added Public Resources Code Section 21074, which defines "tribal cultural resources" as follows:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

A) Included or determined to be eligible for inclusion in the CRHR.
B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Local

City of American Canyon

General Plan

To promote the preservation and restoration of the sites, structures and districts that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon.

Objective 8.19 Ensure that the City's historically and archaeologically significant resources are protected in a manner that preserves and/or enhances the resources' inherent historic value.

Policies

8.19.1 Conduct a comprehensive survey of archaeological and cultural resources and historic vegetation that is based on established criteria and encompasses the entire City and its Sphere of Influence.

8.19.2 Adopt a Preservation Ordinance that will authorize the City to designate appropriate vegetation or archaeological sites deemed to be of historic, archaeological, or cultural significance an American Canyon City Historic Point, Site or District. Such an ordinance shall conform to State and federal criteria for establishing a preservation ordinance.

8.19.3 Explore various methods for the future preservation of historic vegetation and archaeological and cultural resources. For example, consider establishing " receiver site" and "adopt a building" programs to preserve historic structures that must be removed from their sites. Additionally, consider utilizing the Secretary of the Interior Standards for Historic Rehabilitation and standards and guidelines prescribed by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the sites' architectural and historic integrity.

3.4.4 - Methodology

Records Searches and Pedestrian Survey to Identify Existing Cultural Resources

The information in this section is based on the Phase I CRA prepared for this project by FirstCarbon Solutions (FCS) in February 2021. The Phase I CRA used the following methods to analyze the potential impacts of project implementation:

Northwest Information Center

On February 10, 2021, a records search for the project site and a 0.50-mile radius beyond the project boundaries was conducted at the NWIC located at Sonoma State University in Rohnert Park, California. To identify any historic properties or resources, the current inventories of the NRHP, the CRHR, the California Historic Landmarks list, the California Points of Historical Interest list, and the

California Built Environment Resource Directory (BERD) for Napa County were reviewed to determine the existence of previously documented local historical resources.

Results from the NWIC indicate that six known cultural resources have been recorded within a 0.5-mile radius of the project site, and two cultural resources have been recorded within the project site (Table 3.4-1). In addition, 30 area-specific survey reports are on file with the NWIC for the project site and its 0.50-mile search radius (Table 3.4-2.). Of the 30 reports, 10 address sections of the project site itself, indicating that the site has been previously surveyed for cultural resources.

Table 3.4-1: Cultural Resources within 0.5-mile of the Project Site

Resource No.	Resource Description	Date Recorded
P-28-001439	**Corral Complex; HP33 Farm/Ranch**	**2007**
483A-001	**Informal Archaeological Resource**	**1980**
P-28-000384	CA-NAP-000498H: Historic Era Building Foundations	1977
P-28-000643	CA-NAP-000770: Prehistoric Archaeological site	1991
P-28-001156	ARS 99-17-01: Prehistoric Archaeological Site	2001
P-28-002458	AP16: Prehistoric Archaeological Isolate	2016
P-28-002466	876 Green Island Road, American Canyon; HP02 Single-family property	2015
NAP-HRI-001	Goncalves Ranch; HP33. Farm/Ranch	1993
Source: NWIC Records Search. February 10, 2021. Resources listed in **Bold** are located within project boundaries.		

Table 3.4-2: Previous Investigations within 0.5-mile of the Project Site

Report No.	Report Title/Project Focus	Author	Date
S-000153	**Archaeological Impact Evaluation: Proposed Sewage Pipeline, Napa to American Canyon, Napa County, California**	**Thomas F. King**	**1975**
S-001200	**Cultural Resource Assessment of the Napa American Canyon Wastewater Reuse Program**	**Robert A. Gerry**	**1978**
S-014137	**An Archaeological Survey of Two Sites for a Proposed Solid Waste Transfer Station, Napa County, California**	**Janine M. Loyd**	**1992**
S-022036	**A Cultural Resources Evaluation of the "Napa 218" Parcel, APN 057-090-59, in the Napa County Airport Industrial Area, Napa, Napa County**	**Eric Strother and Katherine Flynn**	**1999**
S-022041	**A Cultural Resource Inventory of the Napa Airport Master Environmental Assessment Area, Napa County, California**	**Katherine Flynn, William Roop, and Ronald Melander**	**1983**
S-024768	**Archaeological evaluation of the proposed Devlin Road Extension Project, Napa, Napa County**	**Katherine Flynn**	**1999**

Report No.	Report Title/Project Focus	Author	Date
S-033061	**Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California**	**Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson**	**2006**
S-034422	**Archaeological Assessment Report, Biagi Brothers Wine Distribution Facility, City of American Canyon, Napa County, California**	**James M. Allan and Leigh Martin**	**2007**
S-048153	**Archaeological Resources Study of Devlin Road (Segment H) and Vine Trail Extension Project, American Canyon, Napa County**	**Samantha Dollinger**	**2016**
S-049803	**Cultural Resources Assessment, Green Island Industrial District Roads Project, City of American Canyon, Napa County, California**	**Kara Brunzell and David Brunzell**	**2016**
S-000589	An Archaeological Survey of a Proposed Borrow Site in American Canyon near Napa, California	Richard A. Stradford and David A. Fredrickson	1977
S-000647	Lombard Street Overcrossing, Archaeological Historical Field Survey	Richard B. Hastings	1975
S-002372	Green Island Industrial Park, Napa County	David Chavez	1980
S-009908	Archaeological evaluation of an 8-acre parcel at 1300 Green Island Rd., APN 58-070-24, Napa County, California	Katherine Flynn	1987
S-009912	Archaeological survey of a parcel located at 650 Green Island Road, American Canyon, Napa County	Katherine Flynn	1988
S-010780	Negative Archaeological Survey Report, proposed sale of an excess parcel west of Highway	Mick Hayes	1989
S-011526	Archaeological reconnaissance of the Lands of Struble, Green Island Road, Napa County	Katherine Flynn	1989
S-012429	Archaeological Survey and Evaluation for the Napa Sanitation District Master Plan Update, Napa County, California	Pat Mikkelsen, John Berg, and Paul Bouey	1991
S-012439	Cultural Resources Investigations for the Port of Oakland Phase I Dredging, Cultural Resources Evaluation	David Chavez	1990
S-014281	An Archaeological Survey of a Site for a Proposed Solid Waste Transfer Station, South of Tower Road, Napa County, California	Janine M. Loyd	1992
S-016739	Negative Archaeological Survey Report, proposed Caltrans maintenance station on excess land parcels 27902-1, 2-7878-4, and 2783-1	Katherine M. Dowdall	1994
S-019171	A Cultural Resources Study of the Hess Collection Winery-American Canyon Property, Napa County, California	Vicki R. Beard	1997

Report No.	Report Title/Project Focus	Author	Date
S-021260	Rock Fences of Napa County: A Pilot Study	Kim J. Tremaine and John A. Lopez	1998
S-024769	Archaeological Reconnaissance of a ten-acre parcel located at 1500 Green Island Road, Napa Co	Katherine Flynn	1988
S-030746	A Cultural Resources Study for the Hanna Bridge Project, Project #0253605003-32001, City of American Canyon, Napa County, California	Heidi Koenig	2005
S-034252	An Archaeological Survey of the Green Island Assessment and Reimbursement District, Napa County, California	Thomas Origer	1988
S-034253	Cultural Resources Inspection of the Hanna Court Project Area, American Canyon, Napa County, California	Miley Paul Holman	2006
S-043823	Cultural Resources Inventory and Evaluation Report for Napa River Salt Marsh Restoration Project, Napa and Sonoma Counties, California	No Author	2003
S-048522	A Historical Resources Study for the Jim Oswalt Warehouse IS/MND American Canyon, Napa County, California	Taylor Alshuth and Tom Orige	2016
S-049494	A Historical Resources Study for the Napa Logistics Business Park-Phase II, American Canyon, Napa County, California	Taylor Alshuth and Tom Origer	2016
Source: NWIC Records Search. February 10, 2021. Reports listed in **Bold** address locations within the project boundaries.			

Historic Aerials

A review of 15 historic aerials depicting the project site from 1948 to 2018 indicate that from the earliest aerial, the site was undeveloped, with a single homestead directly outside of its southern border. From 1958 to 2018, the site remained undeveloped, with gradual industrial development occurring to the west, south, east and northeast of the site. The site remains undeveloped to the present day.[26]

Native American Heritage Commission

On January 25, 2021, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the Area of Potential Effect (APE). A response was received on February 4, 2021, indicating that the Sacred Lands File was positive for TRCs in the APE. The NAHC included a list of 10 tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by the proposed project are addressed, a letter containing project information and requesting any additional information was sent to each tribal representative on February 8, 2021. A second follow up letter and/or email was was sent on May 13, 2021. On May 21, 2021, a third and final attempt was made via phone call.

[26] Historic Aerials. 2020. Website: https://www.historicaerials.com/viewer. Accessed June 3, 2021.

On Feburary 9, 2021, a response was received from the Yocha Dehe Wintun Nation stating that the project site falls within the Tribe's traditional use area and could impact known cultural resources important to the Tribe. The Tribe provided recommended mitigation measures and protocols including construction monitoring of all ground disturbance and cultural sensitivity training for all staff on-site. On May 21, 2021, a representative of the Guidiville Indian Rancheria stated that the original letter was forwarded to their historian and a lack of response would mean there are no further comments. No additional responses or requests from tribal representatives have been received to date.

Tribal consultation pursuant to AB 52 has been initiated by the City of American Canyon and is ongoing. Table 3.4-3 summarizes the tribal consultation milestones.

Table 3.4-3: Tribal Consultation Matrix

Tribal Contact	Letter Sent	First Follow Up Attempt	Second Follow Up Attempt	Comments from the Tribe
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community Daniel Gomez, Chairman	2/8/21	5/13/21	5/21/21	No response has been received to date.
Cortina Rancheria – Kletsel Dehe Band of Wintun Indians Charlie Wright, Chairperson	2/8/21	5/13/21	5/21/21	No response has been received to date.
Guidiville Indian Rancheria Donald Duncan, Chairperson	2/8/21	5/13/21	5/21/21	May 21, 2021: FCS spoke with the representative, who stated that the original letter was forwarded to their historian and if no response is received, this means there are no comments. No additional response has been received to date.
Middletown Rancheria of Pomo Indians Jose Simon, Chairperson	2/8/21	5/13/21	5/21/21	No response has been received to date.
Mishewal-Wappo Tribe of Alexander Valley Scott Gabaldon, Chairperson	2/8/21	5/13/21	5/21/21	No response has been received to date.
Pinoleville Pomo Nation Leona Williams, Chairperson	2/8/21	5/13/21	5/21/21	No response has been received to date.
Yocha Dehe Wintun Nation Leland Kinter, THPO	2/8/21	5/13/21	5/21/21	No response has been received to date.

Tribal Contact	Letter Sent	First Follow Up Attempt	Second Follow Up Attempt	Comments from the Tribe
Yocha Dehe Wintun Nation Laverne Bill, Site Protection	2/8/21	5/13/21	5/21/21	Email response: February 9, 2021. Laverne Bill stated that the project site could impact known cultural resources important to the Tribe. The Tribe requests cultural monitors and cultural sensitivity training for all staff on-site. Additional mitigation measures from Yocha Dehe Wintun Nation's Treatment Protocol should be incorporated.
Yocha Dehe Wintun Nation Anthony Roberts, Chairperson	2/8/21	5/13/21	5/21/21	No response has been received to date.
Yocha Dehe Wintun Nation Isaac Bojorquez, Director of Cultural Resources	2/8/21	5/13/21	5/21/21	No response has been received to date.

Cultural Resources Pedestrian Survey

On April 29, 2021, FCS Senior Archaeologist, Dana DePietro, PhD, RPA, and FCS Historian, Ti Ngo conducted a pedestrian survey for unrecorded cultural resources in the APE. The survey began in the southeast corner of the APE and moved west, using north–south transects spaced at 15-meter intervals. All areas of proposed development were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. Due to the high level of vegetation growth in the APE, visibility of native soils was extremely poor, ranging between 1 to 5 percent. Native soils were most clearly visible in cuts and drainages along the edges of the APE, and in areas where bioturbation had exposed subsurface soils. Other sections of poor visibility were intermittently inspected using a hand trowel. Visible soils were largely composed of medium brown (10YR 6/1) silt with moderate clay content, interspersed with small (2-3 cm) stones primarily composed of chalk and schist.

Dr. De Pietro and Mr. Ngo attempted to relocate informal archaeological resource 483A-001 and historic era resource P-28-001439, the historic corral complex. Details regarding these resources can be found in Appendix D. The corral complex was evaluated in 2007, found ineligible for listing as a historic resource, and was subsequently removed from the site. No elements of the corral complex or resource 483A-001 were observed. Both resources are located within 44.8-acres of the project site that will remain undeveloped for the purposes of environmental conservation. Neither are within the proposed construction plan footprint, nor will they be subjected to any ground-disturbing activities.

3.4.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

c) Disturb any human remains, including those interred outside of formal cemeteries?

d) 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 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)?

e) 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 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?

f) 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:
   i. 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
   ii. 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.

3.4.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-1:	**The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.**

Impact Analysis

Historic resources in this context refer to the built environment, mainly buildings and structures over 45 years in age that may be eligible for inclusion on the CRHR or NRHP. Records search results, conducted at the NWIC, identified one historic resource (P-28-001439) located within the project site and three historic resources (P-28-000384, P-28-002466 and NAP-HRI-001) located within the 0.5-mile records search radius. As discussed above, P-28-001439 consists of a corral complex that was used for cattle grazing. The historic resource was evaluated relative to the four CRHR eligibility criteria and found to be ineligible to meet any of the criteria for historic and/or architectural significance required for listing on the NRHP, CRHR, or at the local level. No additional historic resources were encountered during the pedestrian field survey and evaluation. Accordingly, the project will not have an adverse impact on historic era built environment resources.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

No impact.

Archaeological Resources

Impact CUL-2:	**The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.**

Impact Analysis

Records search results from the NWIC identified one informal archaeological resource (483A-001) within the project site and three prehistoric archaeological resources (P-28-000643, P-28-001156 and P-28-002458) located within the 0.5-mile records search radius. Additionally, the Sacred Lands Files search conducted by the NAHC came back positive for TRCs within the project site. During the pedestrian field survey, Dr. DePietro and Mr. Ngo attempted to relocate the informal resource 483A-001, but were unable to find any remaining indication of it. 483A-001 is located within 44.8-acres of the project site that will remain undeveloped for the purposes of environmental conservation, and will not be subjected to any ground-disturbing activities.

No additional archaeological resources were encountered during the pedestrian field survey, however, poor soil visibility and the presence of several archaeological resources in the immediate vicinity increases the possibility of resources being encountered during project construction.

Implementation of Mitigation Measure (MM) CUL-2, which requires a qualified Archaeologist to be present on-site during all earth disturbing activities, would reduce potential impacts to archaeological resources that may be discovered during project construction. If a potential resource is identified, construction would be required to stop until appropriate identification and treatment measures are implemented.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-2a No ground disturbance shall take place within 100 feet of informal archaeological resource 483A-001. The resource shall be preserved in place.

MM CUL-2b An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall be present on-site during all earth disturbing activities. 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 may include obsidian and chert flaked stone 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, hand stones, 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.

The Archaeologist shall inspect the findings within 24 hours of discovery. If it is determined 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 Public Resources Code 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 Public Resources Code 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 proposed 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.

Level of Significance After Mitigation

Less than significant impact.

Human Remains

Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries.

Impact Analysis

While no formal cemeteries or areas containing human remains are known to be in the project vicinity, the possibility always exists that construction-related ground disturbance may uncover previously undiscovered human remains. In the unlikely event such a discovery is made, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 must be followed. Implementation of MM CUL-3, which details inadvertent discovery procedures, would reduce potential impacts to previously undiscovered human remains to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

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

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

Level of Significance After Mitigation

Less than significant.

Listed or Eligible Tribal Cultural Resources

Impact CUL-4: The proposed project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.

Impact Analysis

Records search results from the NWIC indicate several prehistoric sites are located within the project vicinity, and a review of the NAHC Sacred Lands File was positive for recorded TCRs being located within the project site. On February 9, 2021, a response was received from the Yocha Dehe Wintun Nation stating that the project site falls within the Tribe's traditional use area and could impact known cultural resources important to the Tribe. This would constitute a significant impact. The Tribe provided recommended mitigation measures and protocols including construction monitoring of all ground disturbance. Implementation of these protocols, included here as MM CUL-4, would reduce potential impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-4 A Tribal Monitor representing the Yocha Dehe Wintun Nation shall be present during all project-related ground disturbance. Additionally, the Yocha Dehe Wintun Nation's Treatment Protocol (Protocol) shall be followed with respect to Tribal Cultural Resources (TCRs). The purpose of the protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, if any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground-disturbing activity. This Protocol also formalizes procedures for Tribal Monitoring during archaeological studies, grading, and ground-disturbing activities.

1. Cultural Affiliation: The Yocha Dehe Wintun Nation (Tribe) traditionally occupied lands in Yolo, Solano, Lake, Colusa, and Napa Counties. The Tribe has designated its Cultural Resources Committee (Committee) to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with projects on lands culturally affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol.
2. Inadvertent Discovery of Native American Human Remains**:** Whenever Native American human remains are found during the course of a project, the determination of Most Likely Descendant (MLD) under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission (NAHC) upon notification to the NAHC of the discovery of said remains at a project site. If the location of the site and the history and prehistory of the area is culturally affiliated with the Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents. Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe agrees with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely.
3. Treatment of Native American Remains: In the event that Native American human remains are found during development of a project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground-disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity. The Tribe shall complete its inspection and make its MLD recommendation within 48 hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future. The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe’s traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native

American remains are to be treated in the same manner as bones or bone fragments that remain intact.

4. Non-Disclosure of Location of Reburials**:** Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, California Government Code Section 6250 *et seq*. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property.
5. Treatment of Cultural Resources**:** Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a project site shall be turned over to the Tribe for appropriate treatment, unless ordered by a court or agency of competent jurisdiction. The project proponent shall waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary, (for example, an Archaeologist retained by the project proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.
6. Inadvertent Discoveries**:** If additional significant sites or sites not identified as significant in a project environmental review process, but later determined to be significant, are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project proponent, the Lead Agency, and the Tribe to determine whether additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

Level of Significance After Mitigation

Less than significant impact.

Lead Agency Determined Tribal Cultural Resources

Impact CUL-5:	**The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.**

Impact Analysis

FCS sent letters containing project information and requesting any additional information to each tribal representative identified by the NAHC on February 8, 2021. A second follow up letter and/or email was sent on May 13, 2021. On May 21, 2021, a third and final attempt was made via phone call. On February 9, 2021, a response was received from the Yocha Dehe Wintun Nation stating that the project site falls within the Tribe's traditional use area and could impact known cultural resources important to the Tribe. The Tribe provided recommended mitigation measures and protocols including construction monitoring of all ground disturbance and cultural sensitivity training for all staff on-site.

Tribal consultation pursuant to AB 52 has been initiated by the City of American Canyon and is ongoing. The City of American Canyon, in its capacity as lead agency, has not identified any TCRs within the project site that are significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. However, the possibility remains that TCRs in the form of subsurface archaeological resources or human remains may be encountered during project construction. Implementation of MM CUL-2a, MM CUL-2b, MM CUL-3 and MM CUL-4 would require construction monitoring by a qualified Archaeologist and Native American Monitor. These measures include protocols provided by the Yoche Dehe Wintun Nation and would reduce potential impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measures CUL-2a, CUL-2b, CUL-3 and CUL-4.

Level of Significance After Mitigation

Less than significant impact.

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3.5 - Geology, Soils, and Seismicity

3.5.1 - Introduction

This section describes the existing geology, soils, and seismicity setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information provided by the Geotechnical Engineering Report prepared by Wallace Kuhl & Associates and the Geological Fault Investigation prepared by Cornerstone Earth Group. Both reports are provided in Appendix E.

3.5.2 - Environmental Setting

Regional Geology

The site is located in the southern portion of the Napa Valley, which is characterized as a relatively large northwest-trending alluvial valley within the Northern California Coast Range geomorphic province. The valley is at the southernmost end of the Mayacmas Mountains. South of the City of Napa, the hills on the western side of the valley terminate at the marshes bordering the northern end of San Pablo Bay; the hills on the northeast continue to near Sulphur Springs Mountain near the City of Vallejo. The bedrock ridges on each side of the Napa Valley trend northwest, parallel to the general north-northwest structural trend of the North Coast Ranges. Pre-Quaternary bedrock is generally restricted to the foothills, but locally there are low knolls or hills of Tertiary-age bedrock in the central and western parts of the valley. Quaternary alluvial fan deposits shed from the hills on the east, and fluvial deposits associated with the Napa River and its tributary valleys comprise the youngest deposits within the Napa Valley. Late Pleistocene estuarine deposits formed during the last interglacial stage are postulated to underlie a broad geomorphic surface in the southern end of the valley where the subject site is situated.

Within the region, the San Andreas Fault system distributes shearing across a complex assemblage of primarily right-lateral, strike-slip, parallel, and sub-parallel faults that include the Hayward and Calaveras Faults and others (see the “Faulting” section of this report). The mountainous topography west of Napa Valley resulted from latest Pliocene and Quaternary uplift associated with the younger structures.

Local Geology

The site is in an area adjacent to the San Francisco Bay where Quaternary alluvial deposits dominate the local geology. The majority of the site and adjacent areas is underlain by Late Pleistocene to Holocene alluvial fan deposits (“Qf”), which are bound to the north and on the west by older geologic units, including Late Pleistocene fan deposits (“Qpf”) and Early to Middle Pleistocene alluvial fan or terrace deposits (“Qoa”). Specifically, the Qf unit is relatively younger than and was deposited over the Qpf and the Qoa units. The Qf unit is described as 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, moderately to poorly sorted and moderately to poorly bedded. The Qpf unit is described as Late Pleistocene fan deposits. Gently sloping, fan-shaped

alluvial surfaces where Late Pleistocene age is indicated by slight dissection and/or the development of alfisols. The Qoa unit is described as moderately to deeply dissected alluvial deposits capped by alfisols, ultisols, or soils containing a silica or calcic hardpan.

The Huichica Formation (Pliocene) is mapped on the western edge of the site. The formation is described as fluvial gravel, sand, silt, and clay. Holocene alluvium is mapped within the meandering, channelized path of the unnamed creek that extends into the site.

Seismicity

The term *seismicity* describes the effects of seismic waves that are radiated from an earthquake as it ruptures. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. The probability of one or more earthquakes of magnitude 6.7 (Richter scale) or higher occurring in the project area has been evaluated by the United States Geological Survey (USGS). Based on the results of the USGS evaluation, there is a 63 percent likelihood that such an earthquake event will occur in the Bay Area between 2007 and 2036. The faults with the greater probability of movement with a magnitude of 6.7 or higher earthquake are the Hayward Fault at 27 percent, the San Andreas Fault at 21 percent, and the Calaveras Fault at 11 percent. To understand the implications of seismic events, a discussion of faulting and seismic hazards follows.

Faulting

Faults form in rocks when stresses overcome the internal strength of the rock, resulting in a fracture. Large faults develop in response to large, regional stresses operating over a long time, such as those stresses caused by the relative displacement between tectonic plates. According to the elastic rebound theory, these stresses cause strain to build up in the earth's crust until enough strain has built up to exceed the strength along a fault and cause a brittle failure. The slip between the two stuck plates or coherent blocks generates an earthquake. Following an earthquake, strain will build once again until the occurrence of another earthquake. The magnitude of slip is related to the maximum allowable strain that can be built up along a particular fault segment. The greatest build up in strain that is due to the largest relative motion between tectonic plates or fault blocks over the longest period of time will generally produce the largest earthquakes. The distribution of these earthquakes is a study of much interest for both hazard prediction and analysis of active deformation of the earth's crust. Deformation is a complex process, and strain caused by tectonic forces is not only accommodated through faulting but also by folding, uplift, and subsidence, which can be gradual or in direct response to earthquakes.

Faults are mapped to determine earthquake hazards since they occur where earthquakes tend to recur. A historic plane of weakness is more likely to fail under stress and strain than a previously unbroken block of crust. Faults are, therefore, a prime indicator of past seismic activity, and faults with recent activity are presumed to be the best candidates for future earthquakes. However, since slip is not always accommodated by faults that intersect the surface along traces, and since the orientation of stresses and strain in the crust can shift, predicting the location of future earthquakes is complicated. Earthquakes sometimes occur in areas with previously undetected faults or along faults previously thought inactive.

The West Napa, Green Valley, and Rogers Creek are the three faults closest to American Canyon. These faults and their characteristics are summarized in Table 3.5-1 and shown on Exhibit 3.5-1**.**

Table 3.5-1: Fault Summary

Fault	Type	Relationship to Project Site		Maximum Credible Earthquake (magnitude)
		Direction	Distance (miles)	
West Napa	Normal-Oblique	—	<0.1	6.50
Green Valley	Right-Lateral Strike-Slip	East	7.4	6.50
Rogers Creek	Right-Lateral Strike-Slip	Southwest	8.1	7.00
Source: Cornerstone Earth Group 2017.				

West Napa Fault

The West Napa Fault begins under San Pablo Bay and travels north through American Canyon and up the west side of the Napa Valley to the vicinity of Saint Helena. The West Napa Fault is designated an Alquist-Priolo Special Study Area. On August 24, 2014, a magnitude 6.0 earthquake (known as the South Napa Earthquake) occurred on the West Napa Fault, the epicenter of which was approximately 1 mile from the project site. Prior to the 2014 South Napa Earthquake, the last major seismic event on the West Napa Fault was a magnitude 5.2 temblor whose epicenter was near Yountville in September 2000.

Exhibit 3.5-2 depicts the location of the West Napa Fault in relation to the project site. As shown in the exhibit, the fault and Special Study Area overlap with the western portion (Phase 2) of the project site.

Seismic Hazards

Seismicity describes the effects of seismic waves that are radiated from an earthquake as it ruptures. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. To understand the implications of seismic events, a discussion of faulting and seismic hazards is provided below.

Seismic hazards pose a substantial danger to property and human safety and are present because of the risk of naturally occurring geologic events and processes impacting human development. Therefore, the hazard is influenced as much by the conditions of human development as by the frequency and distribution of major geologic events. Seismic hazards present in California include ground rupture along faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure.

Fault Rupture

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the movement of the ground surface along a fault during an earthquake. Typically,

this movement takes place during the short time of an earthquake, but it also can occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet commonly associated with fault rupture or creep.

Following the August 24, 2014, seismic event on the West Napa Fault, fault rupture was observed on two Napa County Airport taxiways and various roadways in Napa County, including State Route 121 and Old Sonoma Road.

Ground Shaking

The severity of ground shaking depends on several variables, such as earthquake magnitude, epicenter distance, local geology, thickness, seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Ground shaking hazards are most pronounced in areas near faults or with unconsolidated alluvium.

Based on observations of damage from recent earthquakes in California (e.g., San Fernando 1971, Whittier-Narrows 1987, Landers 1992, Northridge 1994), ground shaking is responsible for 70 to 100 percent of all earthquake damage. The most common type of damage from ground shaking is structural damage to buildings, which can range from cosmetic stucco cracks to total collapse. The overall level of structural damage from a nearby large earthquake would likely be moderate to heavy, depending on the characteristics of the earthquake, the type of ground, and the condition of the building. Besides damage to buildings, strong ground shaking can cause severe damage from falling objects or broken utility lines. Fire and explosions are also hazards associated with strong ground shaking.

During the 2014 South Napa Earthquake, the USGS instrument readings at monitoring sites in Napa and Vallejo reported peak ground acceleration values ranging from 19.8 to 40.7 percent of gravity, which corresponds to "strong" and "very strong" ground shaking. Following the earthquake, more than 200 persons sought treatment at local hospitals, more than 150 buildings were "red tagged,"[1] and numerous utility lines experienced ruptures or leaks that disrupted service.

Ground Failure

Ground failure includes liquefaction, the liquefaction-induced phenomena of lateral spreading, and lurching.

Liquefaction is a process by which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid rather than a solid. Liquefaction is restricted to certain geologic and hydrologic environments, primarily recently deposited sand and silt in areas with high groundwater levels. The process of liquefaction involves seismic waves passing through saturated granular layers, distorting the granular structure, and causing the particles to collapse. This causes the granular layer to behave temporarily as a viscous liquid, resulting in liquefaction.

[1] A red-tagged building is considered uninhabitable without further assessment or repair under the California Building Standards Code.

Liquefaction can cause the soil beneath a structure to lose strength, which may result in the loss of foundation-bearing capacity. This loss of strength commonly causes the structure to settle or tip. Loss of bearing strength can also cause light buildings with basements, buried tanks, and foundation piles to rise buoyantly through the liquefied soil.

Lateral spreading is lateral ground movement, with some vertical component, caused by liquefaction. In effect, the soil rides on top of the liquefied layer. Lateral spreading can occur on relatively flat sites with slopes less than 2 percent, under certain circumstances, and can cause ground cracking and settlement.

Lurching is the movement of the ground surface toward an open face when the soil liquefies. An open face could be a graded slope, stream bank, canal face, gully, or other similar feature.

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation, which varies according to climactic shifts.

Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in non-technical literature to describe a variety of shallow, rapidly moving earth flows.

Surface Profile/Geomorphology

The project site contains flat topography and ground cover vegetation. There are few exposures of natural earth materials at the subject site except for local erosion scars on sloping ground within the central trough and stream banks of the unnamed creek near the northern edge of the site. At the time of the reconnaissance the site was undeveloped and being used for livestock pasture. Grasses and weeds exist across the ground surface. The central portion of the site is crossed north to south by a seasonal creek that has resulted in subtle depressions accented by wetland vegetation. A topographic rise on the southwest corner of the site corresponds to area where the published maps show the Huichita Formation forming an oblong outcrop at the ground surface.

Site reconnaissance revealed geomorphic features suggesting the presence of fault surface traces, including subtle linear topographic depressions along the northerly trending creek adjacent to the north property line, a dextrally offset drainage, and linear edge along the west edge of wetlands.

Subsurface Profile

Geologic Units

The project site, the property to the south through which the utility lines would be extended, and the pump station site are underlain by Late Pleistocene fan deposits bordered by two younger geologic units: Holocene alluvium and Holocene alluvial fan sentiments.

Native Soils

Soil mapping by the United States Department of Agriculture Natural Resources Conservation Service indicates that the project site consists mostly of Haire loam, 2-9 percent slopes; smaller areas of Clear Lake clay drained, 0-2 percent slopes; and Haire clay loam, 2-9 percent slopes. The characteristics of the three native soils are summarized in Table 3.5-2. Note that fill has been placed on-site and is not reflected in Table 3.5-2.

Table 3.5-2: Native Soils Summary

Soil	Parent Material	Landform	Constituents	Drainage Class
Haire loam, 2-9 percent slopes	Alluvium derived from sedimentary rock	Alluvial fans	Loam; sandy clay loam; clay; sandy clay	Moderately well
Clear Lake clay, drained, 0-2 percent slopes	Basin alluvium derived from igneous, metamorphic, and sedimentary rock	Basin floors	Clay	Poor
Haire clay loam, 2-9 percent slopes	Alluvium derived from sedimentary rock	Alluvial fans	Loam; sandy clay loam; clay; sandy clay	Moderately well
Source: Natural Resources Conservation Service 2021.				

Soil Borings

Wallace Kuhl conducted 52 soil borings in 2020 to evaluate the subsurface profile. The borings indicated that the project site is underlain by moderate-to-high plasticity, stiff-to-hard lean clay to depths of 5 to 10 feet below ground surface. Groundwater was encountered in six borings at depths ranging from 12 to 20 feet below ground surface. Wallace Kuhl's 2020 findings were consistent with Cornerstone Earth Group's 2017 investigation.

Paleontological Resources

The surface of the project site consists of Holocene fan deposits (Qf), Holocene–Pleistocene fan deposits (Qpf), early to middle Pleistocenefan or terrace deposits (Qoa), and the Pliocene Huichica Formation (Th). Also in the surrounding 0.5-mile radius (dashed outline) are modern artificial fill (af, afbm), Holocene–Pleistocene landslide deposits (Qls), the Plio-Pleistocene Petaluma Formation (Tsp), the Pliocene Sonoma Volcanics andesite (Tsv), and the Cretaceous Great Valley Sequence (Kgv). Modern and Holocene deposits are too young to be fossiliferous, whereas andesite is a nonfossiliferous volcanic rock. All of the other units have the potential to yield significant paleontological resources.

3.5.3 - Regulatory Framework

Federal

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the United States Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. A Storm Water Pollution Prevention Plan (SWPPP) is required to control discharges from a project site, including soil erosion, to protect waterways. A SWPPP describes the measures or practices to control discharges during both the construction and operational phases of the project. A SWPPP identifies project design features and structural and nonstructural Best Management Practices (BMPs) that will be used to control, prevent, remove, or reduce stormwater pollution from the site, including sediment from erosion.

State Regulations

California Building Standards Code

The 2019 California Building Code is another name for the body of regulations known as the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. The California Building Code incorporates by reference the International Building Code requirements with necessary California amendments. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards.

Compliance with the California Building Code requires (with very limited exceptions) that structures for human occupancy be designed and constructed to resist the effects of earthquake motions. The Seismic Design Category for a structure is determined in accordance with either California Building Code Section 1613–Earthquake Loads or the American Society of Civil Engineers Standard No. 7-05, Minimum Design Loads for Buildings and Other Structures. In brief, based on the engineering properties and soil-type of soils at a proposed site, the site is assigned a Site Class ranging from A to F. The Site Class is then combined with Spectral Response (ground acceleration induced by earthquake) information for the location to arrive at a Seismic Design Category ranging from A to D, of which D represents the most severe conditions. The classification of a specific site and related calculations must be determined by a qualified Geotechnical Engineer and are site-specific.

Finally, the California Building Code requires that a geotechnical investigation be prepared for all new buildings that are 4,000 square feet or larger, as well as for smaller buildings if they meet certain criteria. The geotechnical investigation must be prepared by a California registered Geotechnical Engineer and address the classification and investigation of the soil, including requirements for geotechnical designs necessary to meet standards for reducing exposure to geological hazards.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] Sections 2621 to 2630) was passed in 1972 to provide a statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically induced ground shaking or landslides.

The law requires the State Geologist to identify regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults and to depict these zones on topographic base maps, typically at a scale of 1 inch to 2,000 feet. Earthquake Fault Zones vary in width, although they are often 0.75-mile wide. Once published, the maps are distributed to the affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. With the exception of single-family wood-frame and steel-frame dwellings that are not part of a larger development (i.e., four units or more), local agencies are required to regulate development within the mapped zones. In general, construction within 50 feet of an active fault zone is prohibited.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process. The Act states, "It is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety." The Act also states, "Cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard."

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to geology, soils, and seismicity:

Goal 9 Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.

Goal 9C Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.

Objective 9.1 Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.

Policy 9.1.1 Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.

Policy 9.1.2 Implement mandatory development restrictions and investigation requirements (by the state, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault zone located within American Canyon and its Planning Area.

Policy 9.1.3 Require that any building intended to have occupancy be located at least 50 feet from either side of an active or potentially active fault.

Objective 9.2 Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.

Policy 9.2.1 Require that development be designed in accordance with seismic requirements of the Uniform Building Code.

Objective 9.3 Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.

Policy 9.3.1 A void development in areas with known liquefaction risk. If these areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.

Policy 9.3.2 Require the submittal of liquefaction mitigation plans for proposed developments located in areas determined to have a high level of liquefaction risk.

Objective 9.4 Protect life, ensure safety, and substantially reduce the potential level of property damage from landslides, mudflows, slope failures and soil hazards. Promote the collection and utilization of more complete information on slope instability potential throughout the City and Planning Area.

Policy 9.4.5 Review proposals for new development and' expansion of existing development in areas that are susceptible to collapsible or expansive soils and require adequate mitigation of these hazards.

Municipal Code

American Canyon Municipal Code, Chapter 16.02 adopts the California Building Code; as such, all new construction within the city limits is required to adhere to its seismic safety standards. The City of American Canyon Community Development Department is responsible for the administration and enforcement of the Building Code.

3.5.4 - Methodology

This analysis in this section is based on the Geotechnical Engineering Report prepared by Wallace Kuhl & Associates in November 2020 and the Geological Fault Investigation prepared by Cornerstone Earth Group in November 2017. Both reports are provided in Appendix E.

Wallace Kuhl drilled 52 borings on the project site in September and October 2020. The soil attributes of the borings were recorded, including moisture, density, and unconfined compressive strength. Wallace Kuhl subsequently laboratory tested five of the boring samples to determine additional attributes, including plasticity index and R-value. The Geotechnical Engineering Report provided recommendations for grading, soil engineering, and construction practices.

Cornerstone Earth Group prepared a fault investigation for proposed utility pipelines that would cross the western portion of project site where the West Napa Fault is present. Cornerstone excavated three trenches ranging from 215 to 394 feet in length to depths of 7.5 to 9.5 feet below ground surface. Exhibit 3.5-3 depicts the locations of the trenches. A certified engineering geologist assessed each trench documented the geologic conditions of each trench to identify the location of

the West Napa Fault. The Geological Fault Investigation provided recommendations for pipeline construction practices.

FirstCarbon Solutions (FCS) also obtained information about faults and seismic hazards from sources including the USGS, the United States Department of Agriculture, and the City of American Canyon General Plan.

At the request of FCS, Dr. Kenneth Finger, Consulting Paleontologist, conducted a records search of the University of California Museum of Paleontology database in January 2021. The query yielded no records of vertebrate or plant localities in Napa County.

3.5.5 - Thresholds of Significance

Appendix G to the California Environmental Quality Act (CEQA) Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to geology, soils, and seismicity are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

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);
    ii. Strong seismic ground shaking;
    iii. Seismic-related ground failure, including liquefaction;
    iv. Landslides;

b) Result in substantial soil erosion or the loss of topsoil;

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;

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;

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 (refer to Section 7, Effects Found not to be Significant); or

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary. The analysis below has been written against the backdrop of CEQA case law addressing the scope of analysis required in Environmental Impact Reports (EIRs) for potential impacts resulting from existing environmental hazards found at the site or in the vicinity of a site for a proposed project. In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377, the California Supreme Court held that "agencies subject to CEQA generally are *not* required to analyze the impact of existing environmental conditions on a project's future users or residents." (Italics added.) The court reasoned that "ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents." (*Id*. at p. 378.)

The court did not hold, however, that CEQA never requires consideration of the effects of existing environmental conditions on the future occupants or users of a proposed project. The circumstances in which such conditions may be considered are narrow: "when a proposed project *risks exacerbating* those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id*. at pp. 377-378, italics added.)

To help readers understand how to conduct impact analysis in light of these general principles, the court provided an example, which, it said, "may be illuminating. Suppose that an agency wants to locate a project next to the site of a long-abandoned gas station. For years, that station pumped gasoline containing methyl tertiary-butyl ether (MTBE), an additive—now banned by California—that can seep into soil and groundwater. [Citations.] Without any additional development in the area, the MTBE might well remain locked in place, an existing condition whose risks—most notably the contamination of the drinking water supply—are limited to the gas station site and its immediate environs. But by virtue of its proposed location, the project threatens to disperse the settled MTBE and thus exacerbate the existing contamination. The agency would have to evaluate the existing condition—here, the presence of MTBE in the soil—as part of its environmental review. Because this type of inquiry still focuses on the project's impacts on the environment—how a project might worsen existing conditions—directing an agency to evaluate how such worsened conditions could affect a project's future users or residents is entirely consistent with this focus and with CEQA as a whole." (*Id*. at p. 389.)

Seismic Hazards

Impact GEO-1:	**The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.**

Impact Analysis

This impact evaluates potential exposure to seismic hazards, including fault rupture, strong ground shaking, ground failure and liquefaction, and landslides, and addresses whether the project could exacerbate any such hazards. Each issue is discussed separately.

Fault Rupture

Phase 1

There are no active earthquake faults within Phase 1. For these reasons, Phase 1 of the proposed project would not be subject to fault rupture during a seismic event nor would it exacerbate exposure to fault rupture hazards. Impacts in this regard would be less than significant.

Phase 2

The West Napa Fault crosses through the western portion of Phase 2. Cornerstone Earth Group conducted a Geological Fault Investigation in 2017 that identified the precise location of the West Napa Fault within Phase 2 of the project site. Pursuant to State law, a 50-foot setback must be established from the fault to the nearest building. Mitigation Measure (MM) GEO-1a requires the applicant to prepare and submit plans for Phase 2, when building permits are sought, demonstrating the required setbacks. The establishment of the setbacks would ensure that the proposed project does not exacerbate exposure to fault rupture hazards. The implementation of this mitigation measure would ensure that the proposed project is not exposed to fault rupture. Impacts would be less than significant.

Strong Ground Shaking

Phases 1 and 2

Phase 1 is located in a seismically active region of California and is susceptible to strong ground shaking during a seismic event.

A design-level geotechnical report for the proposed project would be prepared by 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. Accordingly, MM GEO-1b is proposed, requiring the applicant to submit such a study to the City of American Canyon for review and approval. Standard soil engineering and building design practices would include standards for foundations and structural support of buildings to ensure that they withstand strong ground shaking during a seismic event and avoid the exacerbation of exposure to such hazards. The implementation of this mitigation measure would ensure that the proposed project is not exposed to strong ground shaking hazards. Impacts would be less than significant.

Ground Failure and Liquefaction

Phases 1 and 2

The Geotechnical Engineering Report determined that the project site is underlain by high plasticity soils, which are considered too stiff and dense to be susceptible to liquefaction. Thus, the proposed project would not be susceptible to ground failure, liquefaction, or liquefaction-related phenomena. Thus, the proposed project would not exacerbate exposure to such hazards. Impacts would be less than significant.

Landslides

Phases 1 and 2

The project site contains relatively flat relief, with an approximately 15-foot difference in elevation across the site. There are no slopes near the project site that may be susceptible to landsliding during a seismic event. This precludes the possibility of the proposed project being susceptible to

landsliding. Thus, the proposed project would not exacerbate exposure to such hazards. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-1a Prior to the issuance of building permits for each Phase 2 structure, the project applicant shall submit plans to the City of American Canyon for review and approval that demonstrate a minimum 50-foot setback between the West Napa Fault and each building. The approved plans shall be incorporated into the proposed project.

MM GEO-1b Prior to the issuance of building permits for each Phase 1 and 2 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 grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code (CBC) 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.

Level of Significance After Mitigation

Less than significant impact.

Erosion

Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.

Impact Analysis

Phases 1 and 2

The proposed project would involve grading, building construction, paving, and utility installation activities that may cause erosion and sedimentation. This includes construction activities associated with the proposed project. 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 in Section 3.8, Hydrology and Water Quality, would require the implementation of stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. Standard stormwater pollution prevention measures would include implementing structural and nonstructural control measures within and around disturbed areas to prevent soil and pollutants from leaving the project site. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-1a Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing, street sweeping, routine inspection, etc.) 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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction.

Level of Significance After Mitigation

Less than significant impact.

Unstable Geologic Location

Impact GEO-3: The proposed project would not be located on an unstable geologic unit or soil.

Impact Analysis

Phases 1 and 2

The stability of the underlying geologic units and soils are functions of their constituents. For example, soils with high organic or fill content would generally be considered unsuitable to support urban development. Likewise, soils that are composed of well-compacted alluvium would generally be considered suitable to support urban development.

The project site is underlain by high plasticity soils. The Geotechnical Engineering Report determined that these soils are too stiff and dense to be susceptible to liquefaction. As such, the proposed project would not be susceptible to or cause landslides, lateral spreading, collapse, ground failure, liquefaction, or liquefaction-related phenomena nor would it exacerbate these existing conditions to the extent they exist in the project vicinity. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Expansive Soil

Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.

Impact Analysis

Phases 1 and 2

The Geotechnical Engineering Report found that the project site is underlain by soils with high clay content and are therefore capable of being expansive. The design-level Geotechnical Investigation required by MM GEO-1b would outline standard grading and soil engineering practices would abate these potential hazards. Standard grading and soil engineering practices would include replacing native soils with engineered fill that would not possess expansive characteristics. These grading and soil engineering practices would ensure that the proposed project does not exacerbate the existing expansive soil conditions. Thus, the implementation of this mitigation measure would reduce impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure GEO-1b.

Level of Significance After Mitigation

Less than significant impact.

Paleontological Resources or Unique Geologic Features

Impact GEO-5: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis

Phases 1 and 2

The surface of the project site consists of Holocene fan deposits (Qf), Holocene–Pleistocene fan deposits (Qpf), early to middle Pleistocenefan or terrace deposits (Qoa), and the Pliocene Huichica Formation (Th). Also in the surrounding 0.5-mile radius (dashed outline) are modern artificial fill (af, afbm), Holocene–Pleistocene landslide deposits (Qls), the Plio-Pleistocene Petaluma Formation (Tsp), the Pliocene Sonoma Volcanics andesite (Tsv), and the Cretaceous Great Valley Sequence (Kgv).

Modern and Holocene deposits are too young to be fossiliferous, whereas andesite is a nonfossiliferous volcanic rock. Additionally, there are no recorded vertebrate or plant localities within Napa County.

For these reasons, the project site is not located in an area that is considered likely to have paleontological resources present. The type of depositional environment at the project site typically does not present favorable conditions for the discovery of paleontological resources. In this context, the project would not result in impacts to paleontological resources. However, if significant paleontological resources are discovered, implementation of MM GEO-5 will reduce this potential impact to a less than significant level. The mitigation measure requires treatment and salvage of resources in accordance Society of Vertebrate Paleontology guidelines. The Society of Vertebrate Paleontology is widely recognized as an authoritative information source for paleontological resources. There are no unique geologic features present on the project site or off-site development areas. Therefore, the proposed project would have less than significant impacts on a unique geologic feature.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-5 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. 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.

Level of Significance After Mitigation

Less than significant impact.

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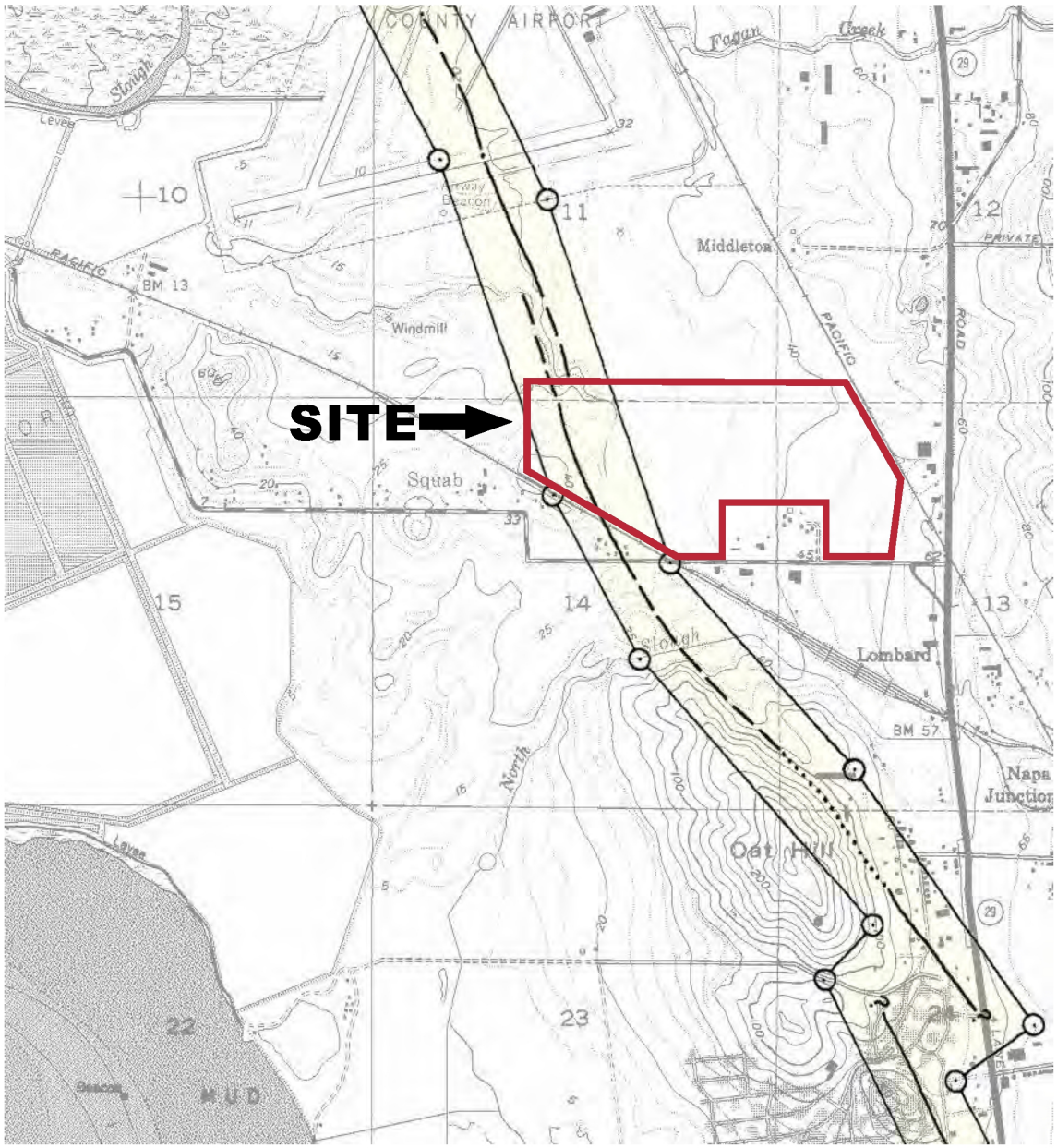
Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION	
						ON LAND	OFFSHORE
Quaternary	Late Quaternary	Historic	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
		Holocene	11,700		? ? ?	Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
					? ?	Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
	Early Quaternary	Pleistocene	700,000		?	Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.	Fault cuts strata of Quaternary age.
Pre-Quaternary			1,600,000			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.
			4.5 billion (Age of Earth)				

Source: Cornerstone Earth Group, October 2017.

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Exhibit 3.5-1
Regional Fault Map

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MAP EXPLANATION

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.

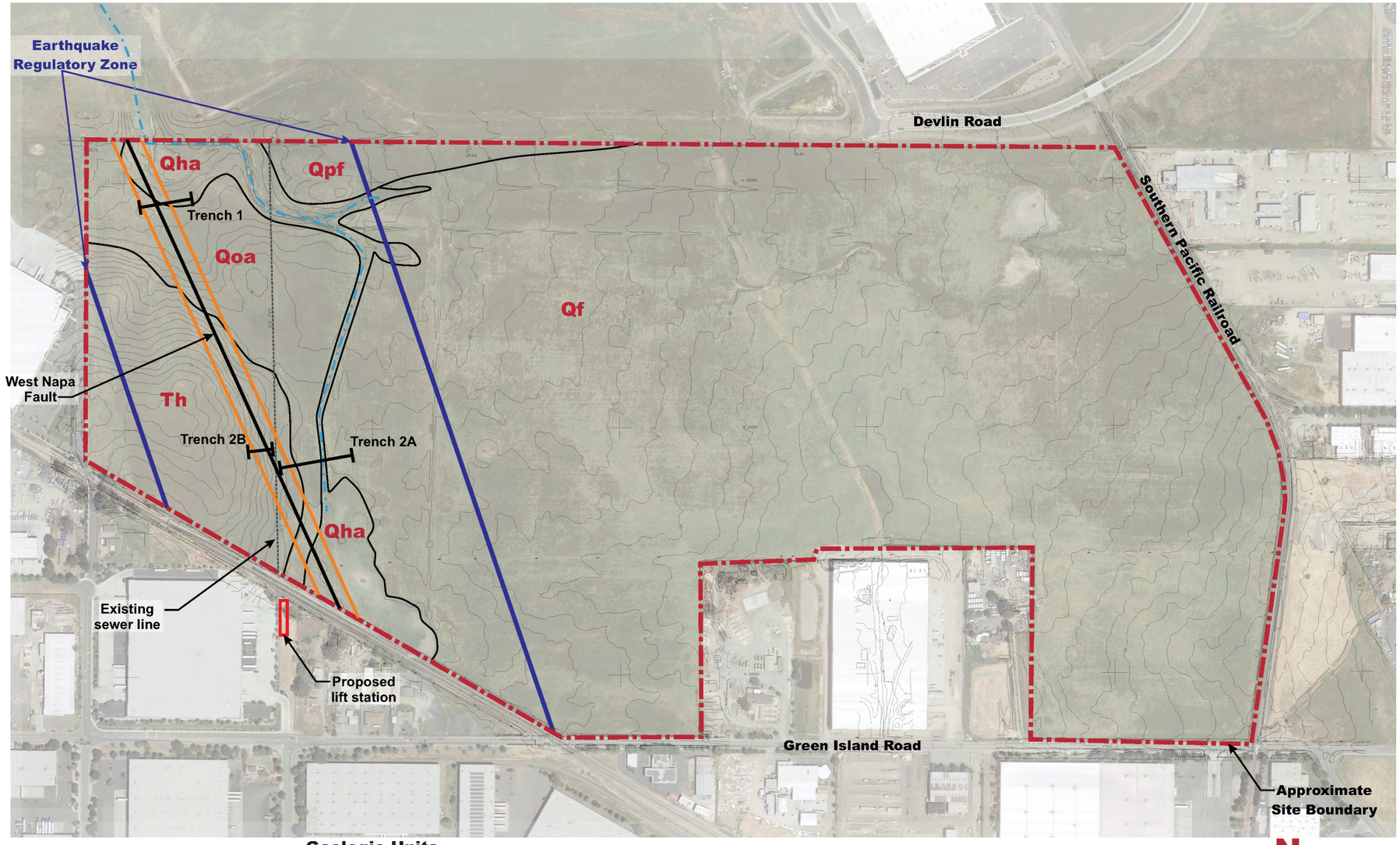
Base: State of California, Special Studies Zones, Cutting Wharf Quadrangle

Source: Cornerstone Earth Group, October 2017.

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Exhibit 3.5-2
West Napa Fault Map

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Source: Cornerstone Earth Group, October 2017.

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Exhibit 3.5-3
Trench Location Map

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3.6 - Greenhouse Gas Emissions and Energy

3.6.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on modeling information and assumptions presented in Section 3.2, Air Quality. The modeling outputs and calculations specific to this Greenhouse Gas Analysis are included in Appendix B of this Draft Environmental Impact Report (Draft EIR). The following comments were received in response to the Notice of Preparation (NOP) related to GHG emissions:

- The EIR should assess and mitigate the impacts of the project on climate change causing GHG emissions.

3.6.2 - Environmental Setting

Greenhouse Effect, Global Warming, and Climate Change

Most of the energy that affects the Earth's climate comes from the sun. Some solar radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected by the atmosphere back toward space. As the Earth absorbs high-frequency solar radiation, its surface gains heat and then re-radiates lower frequency infrared radiation back into the atmosphere.[1]

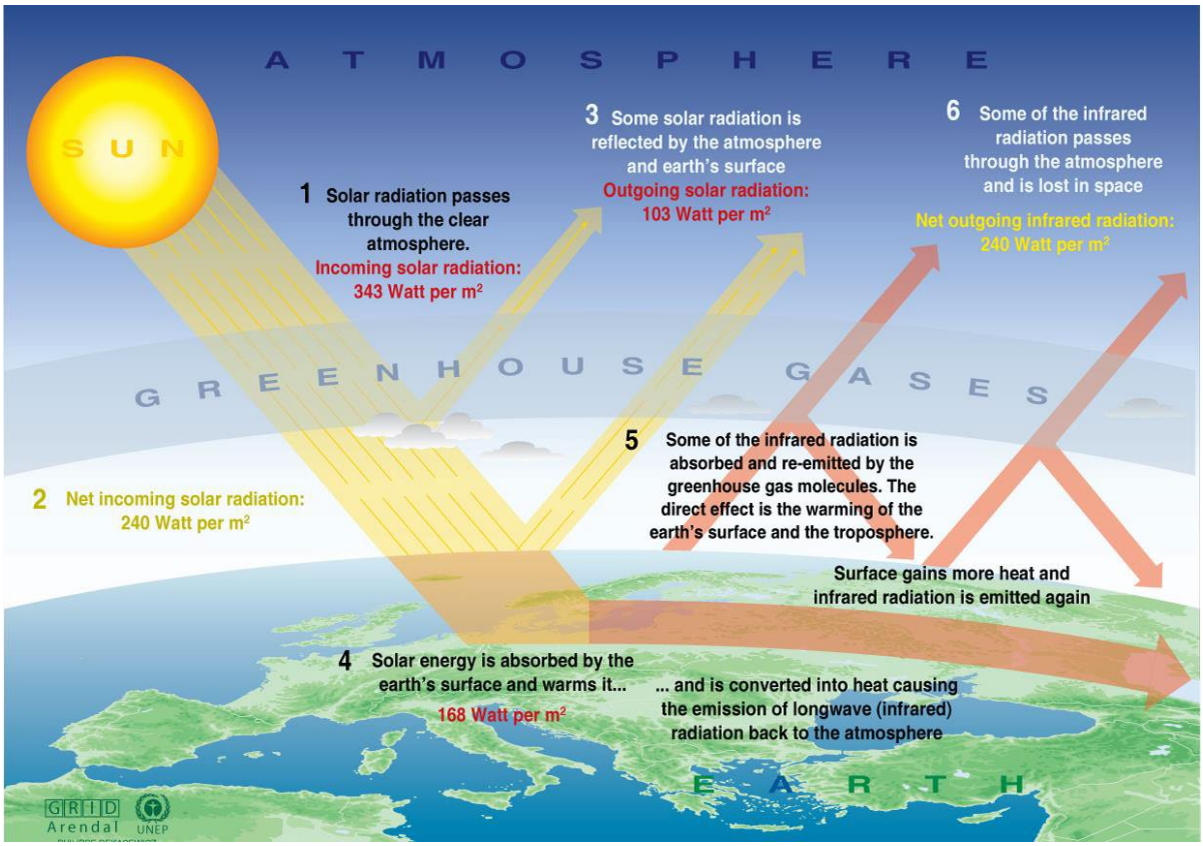
Most solar radiation passes through gases in the atmosphere classified as GHGs; however, infrared radiation is selectively absorbed by GHGs. GHGs in the atmosphere play a critical role in maintaining the balance between the Earth's absorbed and radiated energy, the Earth's radiation budget,[2] by trapping some of the infrared radiation emitted from the Earth's surface that otherwise would have escaped to space (Figure 3.6-1). Radiative forcing is the difference between the incoming energy and outgoing energy.[3] Specifically, GHGs affect the atmosphere's radiative forcing,[4] which in turn affects the Earth's average surface temperature. This phenomenon, the *greenhouse effect*, keeps the Earth's atmosphere near the surface warmer than it would be otherwise and allows successful habitation by humans and other forms of life.

Combustion of fossil fuels and deforestation release carbon into the atmosphere that historically has been stored underground in sediments or in surface vegetation, thus exchanging carbon from the geosphere and biosphere to the atmosphere in the carbon cycle. With the accelerated increase in fossil fuel combustion and deforestation since the Industrial Revolution of the 19th Century, concentrations of GHGs in the atmosphere have increased exponentially. Such emissions of GHGs in excess of natural ambient concentrations contribute to the enhancement of the natural greenhouse effect. This enhanced greenhouse effect has contributed to *global warming*, an increased rate of

[1] Frequencies at which bodies emit radiation are proportional to temperature. The Earth has a much lower temperature than the sun and emits radiation at a lower frequency (longer wavelength) than the high-frequency (short-wavelength) solar radiation emitted by the sun.
[2] This includes all gains of incoming energy and all losses of outgoing energy; the planet is always striving to be in equilibrium.
[3] Positive forcing tends to warm the surface while negative forcing tends to cool it.
[4] This is the change in net irradiance at the tropopause after allowing stratospheric temperatures to readjust to radiative equilibrium, but with surface and tropospheric temperatures and state held fixed at the unperturbed values.

warming of the Earth's average surface temperature.[5] Specifically, increases in GHGs lead to increased absorption of infrared radiation by the Earth's atmosphere and warm the lower atmosphere further, thereby increasing temperatures and evaporation rates near the surface.

Variations in natural phenomena such as volcanoes and solar activity produced most of the global temperature increase that occurred during preindustrial times; more recently, however, increasing atmospheric GHG concentrations resulting from human activity have been responsible for most of the observed global temperature increase.[6]



Source: Philippe Rekacewicz, UNEP/GRID-Arendal. Website: https://www.grida.no/resources/6467. Accessed on April 26, 2019.

Figure 3.6-1: The Greenhouse Effect

Global warming affects global atmospheric circulation and temperatures; oceanic circulation and temperatures; wind and weather patterns; average sea level; ocean acidification; chemical reaction rates; precipitation rates, timing, and form; snowmelt timing and runoff flow; water supply; wildfire risks; and other phenomena, in a manner commonly referred to as *climate change*. Climate change is a change in the average weather of the Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of

[5] This condition results when the Earth has to work harder to maintain its radiation budget, because when more GHGs are present in the atmosphere, the Earth must force emissions of additional infrared radiation out into the atmosphere.

[6] These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

Temperature Predictions by the Intergovernmental Panel on Climate Change

The United Nations Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to understanding climate change, its potential impacts, and options for adaptation and mitigation. The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Sixth Assessment Report, the IPCC predicted that the global mean temperature change from 2015 to 2100, given five scenarios, could range from 1.4°C (degrees Celsius) to 4.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios.[7] The report also concluded that "[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred." Warming of the climate system is now considered to be unequivocal,[8] with the likely range of total human-caused global surface temperature increases from approximately 0.8°C to 1.3°C since 1850.[9]

Greenhouse Gases and Global Emission Sources

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Prominent GHGs that naturally occur in the Earth's atmosphere are water vapor, carbon dioxide (CO_2), methane (CH_4), oxides of nitrogen (NO_X), and ozone. Anthropogenic (human-caused) GHG emissions include releases of these GHGs plus release of human-made gases with high global warming potential (GWP) (ozone-depleting substances such as chlorofluorocarbons (CFCs)[10] and aerosols, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The GHGs listed by the IPCC (CO_2, methane, nitrous oxide, HFCs, PFCs, and sulfur hexafluoride) are discussed below, in order of abundance in the atmosphere. Water vapor, despite being the most abundant GHG, is not discussed below because natural concentrations and fluctuations far outweigh anthropogenic influences, making it impossible to predict. Ozone is not included because it does not directly affect radiative forcing. Ozone-depleting substances, which include chlorofluorocarbons, halons, carbon tetrachloride, methyl chloroform, and hydrochlorofluorocarbons, are not included because they have been primarily replaced by HFCs and PFCs.

The GWP is the potential of a gas or aerosol to trap heat in the atmosphere. The GWP of a gas is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, carbon dioxide (CO_2).

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7 United Nations Intergovernmental Panel on Climate Change (IPCC). 2021. Climate Change 2021: The Physical Science Basis Summary for Policymakers. Website: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf. Accessed December 15, 2021.

8 Ibid.

9 Ibid.

10 CFCs destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited CFCs production in 1987.

Individual GHG compounds have varying potential for contributing to global warming. For example, methane is 25 times as potent as CO_2, while sulfur hexafluoride is 22,200 times more potent than CO_2 on a molecule-per-molecule basis. To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method for comparing GHG emissions is the GWP methodology defined in the IPCC reference documents (IPCC, 2001a). The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalents (CO_2e), which compares the gas in question to that of the same mass of CO_2 (by definition, CO_2 has a GWP of 1). The GWP of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. Thus, to describe how much global warming a given type and amount of GHG may cause, the CO_2e is used. A CO_2e is the mass emissions of an individual GHG multiplied by its GWP. As such, a high GWP represents high absorption of infrared radiation and a long atmospheric lifetime compared to CO_2. One must also select a time horizon to convert GHG emissions to equivalent CO_2 emissions to account for chemical reactivity and lifetime differences among various GHG species. The standard time horizon for climate change analysis is 100 years. Generally, GHG emissions are quantified in terms of metric tons (MT) of CO_2e (MT CO_2e) emitted per year.

The atmospheric residence time of a gas is equal to the total atmospheric abundance of the gas divided by its rate of removal.[11] The atmospheric residence time of a gas is, in effect, a half-life measurement of the length of time a gas is expected to persist in the atmosphere when accounting for removal mechanisms such as chemical transformation and deposition.

Table 3.6-1 lists the GWP of each GHG and its lifetime. Units commonly used to describe the concentration of GHGs in the atmosphere are parts per million (ppm), parts per billion (ppb), and parts per trillion (ppt), referring to the number of molecules of the GHG in a sampling of 1 million, 1 billion, or 1 trillion molecules of air. Collectively, HFCs, PFCs, and sulfur hexafluoride are referred to as high GWP gases. CO_2 is by far the largest component of worldwide CO_2e emissions, followed by methane, nitrous oxide, and high GWP gases, in order of decreasing contribution to CO_2e.

The primary human processes that release GHGs include the burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release methane, such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high GWP gases. Deforestation and land cover conversion have also been identified as contributing to global warming by reducing the Earth's capacity to remove CO_2 from the air and altering the Earth's albedo or surface reflectance, thus allowing more solar radiation to be absorbed. Specifically, CO_2 emissions associated with fossil fuel combustion are the primary contributors to human-induced climate change. CO_2, methane, and nitrous oxide emissions associated with human activities are the next largest contributors to climate change.

GHGs of California concern are defined by California Assembly Bill (AB) 32 (see the Regulatory Environment subsection below for a description) and include CO_2, CH_4, NO_X, HFCs, PFCs, and SF_6. A seventh GHG, nitrogen trifluoride (NF_3), was also added under the California Health and Safety Code

[11] Seinfeld, J.H. and S.N. Pandis. 2006. Atmospheric Chemistry and Physics: From Air Pollution to Climate Change, 2nd Edition. New York. John Wiley & Sons.

Section 38505(g)(7) as a GHG of concern. These GHGs are described in Table 3.6-1 in terms of their physical description and properties, GWP, atmospheric residence lifetime, sources, and atmospheric concentration in 2005.

Table 3.6-1: Description of Greenhouse Gases of California Concern

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO_2)	Odorless, colorless, natural gas.	1	50-200	burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes
Methane (CH_4)	Flammable gas and is the main component of natural gas.	25	12	geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter
Nitrous oxide (N_2O)	Nitrous oxide (laughing gas) is a colorless GHG.	298	114	microbial processes in soil and water; fuel combustion; industrial processes
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms.	3,800-8,100	45-640	refrigerants aerosol propellants; cleaning solvents
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140 to 11,700	1-50,000	automobile air conditioners; refrigerants
Per-fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500 to 9,200	10,000-50,000	primary aluminum production; semiconductor manufacturing

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Sulfur hexafluoride (SF_6)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas
Nitrogen trifluoride (NF_3)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	electronics manufacture for semiconductors and liquid crystal displays

Sources:
United Nations Intergovernmental Panel on Climate Change (IPCC). Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: www.ipcc.ch /publications_and_data/ar4/wg1/en/contents.html. Accessed July 20, 2021.

United Nations Intergovernmental Panel on Climate Change (IPCC). 2014. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Core Writing Team, Pachauri, R.K. and Reisinger, A. [eds.]). IPCC, Geneva, Switzerland. Website: www.ipcc.ch/publications_ and_data/ar4/syr/en/contents.html. Accessed July 20, 2021.

The State has begun the process of addressing pollutants referred to as short-lived climate pollutants. Senate Bill (SB) 605, approved by the Governor on September 14, 2014, required the California Air Resources Board (ARB) to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants by January 1, 2016. The ARB released the Proposed Short-Lived Climate Pollutant Reduction Strategy in April 2016. The ARB has completed an emission inventory of these pollutants, identified research needs, identified existing and potential new control measures that offer co-benefits, and coordinated with other State agencies and districts to develop measures.

The short-lived climate pollutants include three main components: black carbon, fluorinated gases, and methane. Fluorinated gases and methane are described in Table 3.6-1 and are already included in the California GHG inventory. Black carbon has not been included in past GHG inventories; however, the ARB will include it in its comprehensive strategy.[12]

Black carbon is a component of fine particulate matter. Black carbon is formed by incomplete combustion of fossil fuels, biofuels, and biomass. Sources of black carbon within a jurisdiction may include exhaust from diesel trucks, vehicles, and equipment, as well as smoke from biogenic combustion. Biogenic combustion sources of black carbon include the burning of biofuels used for transportation, the burning of biomass for electricity generation and heating, prescribed burning of agricultural residue, and natural and unnatural wildfires. Black carbon is not a gas but an aerosol—particles or liquid droplets suspended in air. Black carbon only remains in the atmosphere for days to

[12] California Air Resources Board (ARB). 2015. Short-Lived Climate Pollutant Reduction Strategy, Concept Paper. May. Website: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-draft-may2015. Accessed May 19, 2021

weeks, whereas other GHGs can remain in the atmosphere for years. Black carbon can be deposited on snow, where it absorbs sunlight, reduces sunlight reflectivity, and hastens snowmelt. Direct effects include absorbing incoming and outgoing radiation; indirectly, black carbon can also affect cloud reflectivity, precipitation, and surface dimming (cooling).

GWPs for black carbon were not defined by the IPCC in its Fourth Assessment Report. The ARB has identified a GWP of 3,200 using a 20-year time horizon and 900 using a 100-year time horizon from the IPCC Fifth Assessment. Sources of black carbon are already regulated by the ARB, and air district criteria pollutant and toxic regulations that control fine particulate emissions from diesel engines and other combustion sources.[13] Additional controls on the sources of black carbon specifically for their GHG impacts beyond those required for toxic and fine particulates are not likely to be needed.

Ozone is another short-lived climate pollutant that will be part of the strategy. Ozone affects evaporation rates, cloud formation, and precipitation levels. Ozone is not directly emitted, so its precursor emissions, volatile organic compounds (VOC) and oxides of nitrogen (NO_X) on a regional scale and CH_4 on a hemispheric scale will be subject of the strategy.[14]

Water vapor is also considered a GHG. Water vapor is an important component of our climate system and is not regulated. Increasing water vapor leads to warmer temperatures, which causes more water vapor to be absorbed into the air. Warming and water absorption increase in a spiraling cycle. Water vapor feedback can also amplify the warming effect of other GHGs, such that the warming brought about by increased carbon dioxide allows more water vapor to enter the atmosphere.[15]

Global Climate Change Issue

Climate change is a global problem because GHGs are global pollutants, unlike criteria air pollutants and hazardous air pollutants (also called toxic air contaminants), which are pollutants of regional and local concern. Pollutants with localized air quality effects have relatively short atmospheric lifetimes, approximately 1 day; by contrast, GHGs have long atmospheric lifetimes, several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe.

Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more CO_2 is currently emitted into the atmosphere than is sequestered. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered through ocean

[13] California Air Resources Board (ARB). 2015. Short-Lived Climate Pollutant Reduction Strategy, Concept Paper. May. Website: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-draft-may2015. Accessed May 19, 2021.
[14] Ibid.
[15] National Aeronautics and Space Administration (NASA). 2015. NASA—Global Climate Change, Vital Signs of a Planet. Website: http://climate.nasa.gov/causes/. Accessed May 19, 2021.

uptake, Northern Hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46 percent of human-caused CO_2 emissions is stored in the atmosphere.[16]

Similarly, effects of GHGs are borne globally, as opposed to the localized air quality effects of criteria air pollutants and hazardous air pollutants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known and cannot be quantified, and no single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global or local climates or microclimate.

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. A cumulative discussion and analysis of project impacts on global climate change is presented in this EIR because, although it is unlikely that a single project will contribute significantly to climate change, cumulative emissions from many projects affect global GHG concentrations and the climate system.

Global climate change has the potential to result in sea level rise (resulting in flooding of low-lying areas), to affect rainfall and snowfall (leading to changes in water supply), to affect temperatures and habitats (affecting biological resources and public health), and to result in many other adverse environmental consequences.

Although the international, national, State, and regional communities are beginning to address GHGs and the potential effects of climate change, worldwide GHG emissions will likely continue to rise over the next decades.

Climate and Topography

Climate is the accumulation of daily and seasonal weather events over a long period of time, whereas weather is defined as the condition of the atmosphere at any particular time and place. For a detailed discussion of existing regional and project site climate and topography, see Section 3.2, Air Quality.

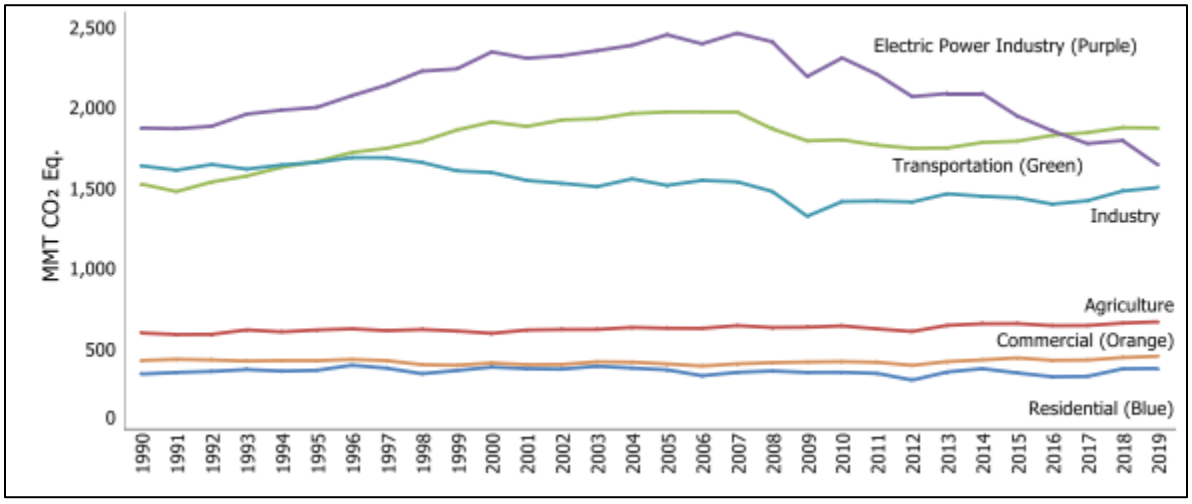
Existing GHG Emissions

United States GHG Inventory

Total U.S. GHG emissions have increased by 1.8 percent from 1990 to 2019.[17] Figure 3.6-2 presents the trend in U.S. GHG emissions by economic sector from 1990 to 2019. Total U.S. GHG emissions increased by 2.8 percent from 1990 to 2019 (an increase of 142.4 million metric tons [MMT] CO_2e). Since 1990, U.S. emissions have increased at an average annual rate of 0.3 percent. Transportation emissions also increased because of an increase in Vehicle Miles Traveled (VMT). Within the United States, fossil fuel combustion accounted for 92.4 percent of CO_2 emissions in 2019. Transportation was the largest emitter of CO_2 in 2019, accounting for 28.6 percent of emissions, followed by electric power generation, accounting for 25.1 percent.

[16] Seinfeld, J. H. and S.N. Pandis. 1998. Atmospheric Chemistry and Physics from Air Pollution to Climate Change. New York. John Wiley & Sons.

[17] United States Environmental Protection Agency (EPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 – Executive Summary. Website: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-chapter-executive-summary.pdf. Accessed September 13, 2021.



Note: Emissions shown do not include carbon sinks such as change in land uses and forestry.

Source: United States Environmental Protection Agency (EPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 – Executive Summary. Website: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-chapter-executive-summary.pdf. Accessed September 13, 2021.

Figure 3.6-2: U.S. Greenhouse Gas Emissions Allocated to Economic Sectors (1990-2019)

California GHG Inventory

As the second largest emitter of GHG emissions in the United States., California contributes a large quantity (418.2 MMT CO_2e in 2019) of GHG emissions to the atmosphere.[18,19] Human-related emissions of CO_2 are largely byproducts of fossil fuel combustion and are attributable to transportation, industry/ manufacturing, electricity generation, natural gas consumption, and agriculture processes. In California, the transportation sector is the largest emitter at 41 percent of GHG emissions, followed by industrial at 24 percent of GHG emissions.[20]

Bay Area Air Quality Management District GHG Inventory

The Bay Area Air Quality Management District (BAAQMD) prepared a GHG inventory for the San Francisco Bay Area (Bay Area), which provides an estimate of GHG emissions in the base year 2011 for all counties located in the jurisdiction of BAAQMD: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Napa, and the southern portions of Solano and Sonoma.[21] This GHG inventory is based on the standards for criteria pollutant inventories and is intended to support BAAQMD's climate protection activities.

Table 3.6-2 shows the 2011 breakdown of emissions by end-use sector for each county within the BAAQMD's jurisdiction. The estimated GHG emissions are presented in CO_2e, which weights each GHG by its GWP. The GWPs used in the BAAQMD inventory are from the Second Assessment Report of the IPCC.

[18] World Resources Institute (WRI). 2017. 8 Charts to Understand US State Greenhouse Gas Emissions. Website: https://www.wri.org/insights/8-charts-understand-us-state-greenhouse-gas-emissions. Accessed September 10, 2021.
[19] California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data, 2000-2019 Trends Figure Data. Website: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed September 10, 2021.
[20] California Air Resources Board (ARB). 2018. California Greenhouse Inventory—Graphs. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed September 13, 2021.
[21] Bay Area Air Quality Management District. (BAAQMD). 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases - Base Year 2011. May 14, 2021.

In 2011, GHG emissions from the Napa County accounted for approximately 1.7 percent of the Bay Area's total GHG emissions with 0.2 percent of the Bay Area's total GHG emissions coming from the industrial/commercial land uses in Napa County.[22] Transportation is the largest GHG emissions sector in the Bay Area, followed by industrial/commercial, electricity generation and cogeneration, and residential fuel usage. In Napa County, the transportation also generates the largest amount of GHG emissions, followed by the industrial/commercial sector.

Table 3.6-2: 2011 GHG Emissions by Sector and County (MMT CO_2e/Year)

Sector	Alameda	Contra Costa	Marin	Napa	San Francisco	San Mateo	Santa Clara	Solano*	Sonoma*
Industrial/Commercial	2.7	17.8	0.4	0.2	1.2	1.4	4.1	2.7	0.5
Residential Fuel	1.3	1.0	0.3	0.1	0.9	0.8	1.5	0.3	0.4
Electricity/Co-gen	0.9	7.2	0.1	0.1	0.5	0.4	2.2	0.4	0.2
Off-road Equipment	0.2	0.2	0.0	0.0	0.2	0.1	0.4	0.0	0.
Transportation	7.9	5.0	1.3	0.9	3.0	5.0	7.6	1.6	2.0
Agriculture/Farming	0.1	0.2	0.2	0.1	0.0	0.0	0.2	0.1	0.2
Total	**13.2**	**31.4**	**2.4**	**1.5**	**5.7**	**7.7**	**16.0**	**5.1**	**3.5**

Notes:
* Portion within BAAQMD jurisdiction
BAAQMD = Bay Area Air Quality Management District
CO_2e = carbon dioxide equivalent
co-gen = cogeneration
MMT = million metric tons
Source: Bay Area Air Quality Management District. (BAAQMD). 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases–Base Year 2011. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/emission-inventory/by2011_ghgsummary.pdf. January. Accessed July 20, 2021.

Climate Change Trends and Effects

CO_2 accounts for more than 75 percent of all anthropogenic GHG emissions, the atmospheric residence time of CO_2 is decades to centuries, and global atmospheric concentrations of CO_2 continue to increase at a faster rate than ever previously recorded. Thus, the warming impacts of CO_2 will persist for hundreds of years after mitigation is implemented to reduce GHG concentrations.

California

Substantially higher temperatures, more extreme wildfires, and rising sea levels are just some of the direct effects experienced in California.[23,24] As reported by the California Natural Resources Agency in 2009, despite annual variations in weather patterns, California has seen a trend of increased

[22] Bay Area Air Quality Management District. (BAAQMD). 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases - Base Year 2011. May 14, 2021.
[23] California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website: http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed May 19, 2021.
[24] California Energy Commission (CEC). 2012. Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. Website: https://ucanr.edu/sites/Jackson_Lab/files/155618.pdf. Accessed May 19, 2021.

average temperatures, more extreme hot days, fewer cold nights, longer growing seasons, less winter snow, and earlier snowmelt and rainwater runoff. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and a larger proportion of total precipitation is falling as rain instead of snow.[25] Sea level rose by as much as 7 inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources.

These observed trends in California's climate are projected to continue in the future. Research indicates that California will experience overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea level rise. The frequency, intensity, and duration of extreme weather events such as heat waves, wildfires, droughts, and floods will also change.[26] In addition, increased air pollution and spread of insects potentially carrying infectious diseases will also occur as the climate-associated temperature and associated species clines shift in latitude.

In California, climate change may result in consequences such as the following.[27,28]

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the 21st Century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the

[25] California Energy Commission (CEC). 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. Draft Final Report. CEC-600-2006-013-D. Website: http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-D.PDF. Accessed May 19, 2021.

[26] California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website: https://resources.ca.gov/CNRALegacyFiles/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed May 19, 2021.

[27] California Climate Change Center. (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: http://climate.calcommons.org/bib/our-changing-climate-assessing-risks-california-summary-report-california-climate-change-center. Accessed May 19, 2021.

[28] Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: https://resources.ca.gov/CNRALegacyFiles/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed May 19, 2021.

increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.

- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

Bay Area

The following is a summary of climate change factors and predicted trends specific to the Bay Area.

Temperature, Heat, Drought, and Wildfire Events

The Bay Area is expected to experience warming over the rest of the 21st Century. Consistent with Statewide projections, the annual average temperature in the Bay Area will likely increase by 2.7°F between 2000 and 2050, based on GHGs that have already been emitted into the atmosphere. By the end of the century, the increase in the Bay Area's annual average temperature may range from approximately 3.5°F to 11°F relative to the average annual temperature simulated for the 1961–1990 baseline period used for the study, depending on the GHG emissions scenarios.[29] The projected rate of warming, especially in the latter half of the 21st Century is considerably greater than warming rates derived from historical observed data.

Specific predictions related to temperature/heat are summarized below.

- The annual average temperature in the Bay Area has been increasing over the last several decades.
- The Bay Area is expected to see an increase in average annual temperature of 2.7°F by 2050, and 3.5°F to 11°F by 2100. Projections show a greater warming trend during the summer season. The coastal parts of the Bay Area will experience the most moderate warming trends.[30]
- Extreme heat events are expected to increase in duration, frequency, and severity by 2050. Extreme freeze events are expected to decrease in frequency and severity by 2100, but occasional colder-than-historical events may occur by 2050.[31]

[29] California Climate Change Center (CCCC). 2009. Climate Change Scenarios and Sea Level Rise Estimates for the California 2009 Climate Change Scenarios Assessment. Website: https://www.researchgate.net/publication/231181370_Climate_change_scenarios_and_sea_level_rise_estimates_for_the_California_2009_climate_change_scenarios_assessment. Accessed August 3, 2021.

[30] Cal-Adapt. 2021. Climate Tools. Website: http://cal-adapt.org/tools/. Accessed May 14, 2021.

[31] Ibid.

Precipitation, Rainfall, and Flooding Events

Studies of the effect of climate change on the long-term average precipitation for California show some variance.[32] Considerable variability exists across individual models and examining the average changes can mask more extreme scenarios that project much wetter or drier conditions. California is expected to maintain a Mediterranean climate through the next century, with dry summers and wet winters that vary between seasons, years, and decades. Wetter winters and drier springs are also expected, but overall annual precipitation is not projected to change substantially. By midcentury, more precipitation is projected to occur in winter in the form of less frequent but larger events. The majority of global climate models predict drying trends across the State by 2100.[33]

Specific factors related to precipitation/rainfall/extreme events are summarized below.

- The Bay Area has not experienced substantial changes in rainfall depth or intensities over the past 30 years.
- The Bay Area will continue to experience a Mediterranean climate, with little change in annual precipitation projected by 2050, although a high degree of variability may persist.
- An annual drying trend is projected to occur by 2100. The greatest decline in precipitation is expected to occur during the spring months, while minimal change is expected during the winter months.
- Increases in drought duration and frequency coupled with higher temperatures, as experienced in 2012, 2013, and 2014, will increase the likelihood of wildfires.
- California is expected to see increases in the magnitude of extreme events, including increased precipitation delivered from atmospheric river events, which would bring high levels of rainfall during short time periods and increase the chance of flash floods. The Bay Area is also expected to see an increase in precipitation intensities, but possibly through less frequent events.[34]

Reduced Sierra Nevada Snowpack and Water Supply Shortages

If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate surface water supplies.

Vectors and Disease Events

Climate change will likely increase vector insect populations and, in turn, may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas, such as malaria, dengue fever, yellow fever, and encephalitis.

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[32] California Climate Change Center (CCCC). 2009. Climate Change Scenarios and Sea Level Rise Estimates for the California 2009 Climate Change Scenarios Assessment. CEC-500-2009-014-F. Website: https://www.researchgate.net/publication/231181370_Climate_change_scenarios_and_sea_level_rise_estimates_for_the_California_2009_climate_change_scenarios_assessment. Accessed August 3, 2021.

[33] California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008.

[34] California Climate Change Center (CCCC) 2009. Climate Change Scenarios and Sea Level Rise Estimates for the California 2009 Climate Change Scenarios Assessment. CEC-500-2009-014-F. August.

Air Quality and Pollution Events

Warming-induced increases in the frequency of smog (ground-level ozone) events and particulate air pollution will exacerbate respiratory disorders.[35] Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). The potential health effects of ozone and particulate matter are discussed in criteria pollutant analyses. At very high indoor concentrations (not at levels existing outside), carbon dioxide, methane, SF_6, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.[36,37]

Napa County

Temperature, Heat, Drought, and Wildfire Events

The County of Napa is expected to experience warming over the rest of the 21st Century. Consistent with Statewide projections, the annual average temperature in the County will likely increase by 2.7°F above 2000 averages by 2050 and, depending on emission levels, 4.1-8.6°F by 2100.[38] Changes in precipitation patterns and increased temperatures associated with climate change will alter plants and soils distribution and character or natural vegetation and associated moisture content. Increased temperature is expected to lead to secondary climate change impacts including increases in frequency, intensity, and duration of extreme events and heat waves in California.

The County has a historical average of four extreme heat days a year and is projected to increase to an annual average of 23-26 extreme heat days per year in 2050. Events in which these extreme temperatures are experienced over a period of several days are known as heat waves. The County has a heat threshold of 92°F and when exceeded for a period of five days, qualifies as a heat wave. Heat waves in the County are infrequent, with no more than two heat waves occurring in one year between 1950 and 2016, but are projected to increase in frequency toward the middle of the century. Along with an increased frequency of heat events, heat waves are also projected to occur both earlier and later in the season, which historically started in late May to early June and ended in mid-September.

Precipitation, Rainfall, and Flooding Events

Reduced precipitation in the County of Napa could lead to higher risks of drought, while increased precipitation could cause flooding or soil erosion.

The County is not located in an area where snow typically accumulates, major water districts and utilities in the County receive a significant amount of water from the State Water Project, which depends on spring and early-summer snowmelt in the Sierra Nevada for water supply. Additionally, agricultural water users in the unincorporated areas of the County are the primary users of groundwater. Increased average temperatures and changes in the timing and amounts of

[35] United States Environmental Protection Agency (EPA) 2009. Ozone and your Health. EPA-456/F-09-001. February.
[36] National Institute for Occupational Safety and Health (NIOSH) 2018. Carbon Dioxide. November 29. Website: www.cdc.gov/niosh/npg/npgd0103.html. Accessed May 19, 2021.
[37] Occupational Safety and Health Administration (OSHA) 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling/data/CH_250700.html. Accessed May 19, 2021.
[38] County of Napa. 2012. Napa County Revised Draft Climate Action Plan. Website: https://www.countyofnapa.org/DocumentCenter/View/9247/Revised-Draft-CAP-PDF?bidId=. Accessed July 28, 2021.

precipitation could affect local aquifer recharge for groundwater supplies, and thus the County could face increasing challenges of providing adequate water supplies because of increased uncertainty in the amount and timing of water availability to meet future demand. If demand exceeds supply, water users could face shortages in normal or dry years.

According to Napa County's Operational Area Hazard Mitigation Plan, the County is already considerably vulnerable to flooding. Flooding has caused the most disaster declarations and the most damage and loss of life historically in the County, with floods usually occurring during the highest precipitation season or heavy rainfall after prolonged dry periods. Almost all of the land adjacent to the Napa River is subject to flooding that has a 1 percent probability of occurring in any given year, or a 100-year flood event. While it is uncertain exactly how and to what extent climate change will affect flooding events in the County, it is reasonable to assume that any increase in flooding could have serious ramifications as the area is already considerably vulnerable. Additional information on increased risk of flooding, which could be exacerbated by sea level rise in the southern portion of the County, is included below.

The southwestern portion of the County includes the mouth of the Napa River, which forms a tidal estuary that drains into San Pablo Bay. Less than 1 percent of the County's population is considered at risk and vulnerable to sea level rise. Because several physical structures (i.e., levees) are currently in place to protect against a 100-year flood event, approximately 36 acres in the County are currently at risk for flooding. The American Canyon Power Plant and the Napa Sanitation District Water Treatment Plant could become vulnerable to a 100-year flood event with 1.4 meters (m) of sea level rise. The majority of area that is at risk is currently undeveloped or used for agricultural purposes. Specific areas along the Napa River that could become vulnerable include Buchli, Cuttings Wharf, Thompson, and Imola, along with areas further north along the Napa River, including some industrial uses, wineries, and parts of Downtown Napa (i.e., up to 3rd Street and portions east of State Route 29).

Vectors and Disease Events

A changing climate is expected to subject forests to increased stress due to drought, disease, invasive species, and insect pests. These stressors are likely to make forests more vulnerable to catastrophic fire.

Air Quality and Pollution Events

According to Napa County's Operational Area Hazard Mitigation Plan, the County has a history of wildfires. Before the 2017 wildfires, more than 200,000 acres of the County's 482,000 acres burned in the last 30 years, most of which occurred in the unincorporated areas. The County is already considered to be an area that is at high risk for wildfires, which is only expected to increase by the end of the century. This increase could cause additional threats to the County and has the potential to affect emergency services, roads, water supplies to residents, housing access, and quality of life. Heavy winter rainfall resulted in an abundance of vegetation, which dried out in the summer, creating hazardous fuel conditions. Under the low-emissions scenario, when compared with a baseline year of 2010 wildfires are 11 percent more likely to occur in 2020, 15 percent more likely to occur in 2050, and 12 percent more likely to occur in 2085. Under the high-emissions scenario, compared to the 2010 baseline year wildfires are 14 percent more likely to occur in 2020, 13 percent

more likely in 2050, and 22 percent more likely to occur in 2085. Given that the County is currently at risk for wildfire, these increases of between 10 and 20 percent under both emissions scenarios is significant and could result in additional threats and increased vulnerability.

Energy Basics

Energy is generally transmitted either in the form of electricity, measured in kilowatt-hours (kWh)[39] or megawatt-hours (MWh),[40] or natural gas measured in therms.[41]

Electricity

Electricity is used primarily for lighting, appliances, and other uses associated with operation of the proposed project.

Natural Gas

Natural gas is used primarily for heating and water heating associated with operation of the proposed project.

Fuel

Fuel is used primarily for powering off-road equipment, trucks, and worker vehicles. The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution, and Use

State of California

In 2019, the State of California generated approximately 277,704 gigawatt-hours (GWh) of electricity which decreased by 2.7 percent from 2018.[42] Approximately 68 percent of the energy generation is sourced from natural gas, coal, and non-renewables and 32 percent from renewable sources (i.e., solar, wind, and geothermal.[43]

In 2019, California ranked second in the nation in conventional hydroelectric generation, fourth in electricity production, and first as a producer of electricity from solar, geothermal, and biomass resources. California leads the nation in solar thermal electricity capacity and generation.

Electricity and natural gas is distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned LSEs, rural electric cooperatives, community choice aggregators, and electric service providers.[44]

[39] 1 kW = 1.000 watts; A watt is a derived unit of power that measures rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

[40] 1 MW = 1 million watts

[41] A unit for quantity of heat that equals 100,000 British thermal units. A British thermal unit is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

[42] California Energy Commission (CEC). 2020. 2019 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2019. Accessed September 13, 2021.

[43] California Energy Commission (CEC). 2020. 2019 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2019. Accessed September 13, 2021.

[44] California Energy Commission (CEC). Electric Load-Serving Entities (LSEs) in California Website: https://www.energy.ca.gov/almanac/electricity_data/utilities.html. Accessed August 20, 2021.

County of Napa

Pacific Gas and Electric Company (PG&E) provides electricity to many of the cities throughout Napa County. Local community choice aggregations (CCAs) can also provide electricity services alternative to the region's traditional utility supplier, PG&E. The local CCA for American Canyon is Marin Clean Energy (MCE). With the passing of SB 790 in 2011, residential and commercial customers within a local CCA jurisdiction are automatically enrolled in that CCA's electricity service but retain the ability to opt-out and return to their traditional utility supplier.

According to the California Energy Commission (CEC), Napa County's energy consumption was approximately 1,043 GWh in 2019.[45] As Napa County's population in 2019 was an estimated 139,608 people,[46] the County experienced a per capita electricity consumption of an estimated 7,471 kWh per year.

Project Site

The project site is currently vacant and does not consume electricity. PG&E provides electricity to the project site.

Natural Gas Generation, Distribution, and Use

State of California

Natural gas is used for everything from generating electricity to cooking and space heating to an alternative transportation fuel. Natural gas generation (in kWh) represented 11 percent of electric power generation in 1990 and increased over the 30-year period to represent 34 percent of electric power generation in 2019.[47] In 2019, the State ranked 14 in natural gas marketed production, producing 196,823 million cubic feet of natural gas.[48]

Natural gas-fired generation has become the dominant source of electricity in California, as it currently fuels approximately 45 percent of electricity consumption.[49] Because natural gas is a dispatchable resource that provides load when the availability of hydroelectric power generation and/or other sources decrease, use varies greatly from year to year. The availability of hydroelectric resources, the emergence of renewable resources for electricity generation, and overall consumer demand are the variables that shape natural gas use in electric generation.

[45] California Energy Commission (CEC). 2020. Electricity Generation by County. Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed September 22, 2021.

[46] California Department of Finance (CDF). 2021. E-4 Population Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. Website: https://dof.ca.gov/forecasting/Demographics/estimates/estimates-e4-2010-2021/. Accessed April 11, 2022.

[47] United States Environmental Protection Agency (EPA). 2016. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=wEy8wQuGrWS8Ef_hSLXHy1kYwKs4.ZaU. Accessed September 13, 2021

[48] United States Energy Information Administration (EIA). 2020. Rankings: Natural Gas Marketed Production, 2019. Website: https://www.eia.gov/state/rankings/?sid=CA#series/47. Accessed September 13, 2021.

[49] California Energy Commission (CEC). 2021. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california. Accessed September 20, 2021.

County of Napa

As mentioned prior, PG&E provides natural gas to the unincorporated portions of Napa County. In 2019, Napa County's natural gas consumption was approximately 40 million US Therms, or approximately 3,971,812 million British thermal units (MMBtu).[50] As Napa County's population in 2019 was an estimated 139,608 people,[51] the County experienced a per capita natural gas consumption of an estimated 28.45 MMBtu per year.

Fuel Use

State of California

California is one of the top producers of petroleum in the nation, with drilling operations occurring throughout the State. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in ports in Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports.[52] Since 2012, foreign suppliers, led by Saudi Arabia, provide over half of the crude oil refined in California.[53,54] According to the United States Energy Information Administration (EIA), California's field production of crude oil has steadily declined since the mid-1980s, totaling approximately 161.5 million barrels in 2019.[55]

According to the EIA, transportation accounted for nearly 40 percent of California's total energy demand, amounting to approximately 3,170 trillion British Thermal Unit (BTU) in 2018.[56] California's transportation sector, including rail and aviation, consumed roughly 584 million barrels of petroleum fuels in 2018.[57] In 2018, petroleum-based fuels were used for approximately 86 percent of the State's total transportation activity.[58] The CEC produces the California Annual Retail Fuel Outlet Report, which is a compilation of gasoline and diesel fuel sales data from across the State available at the county level. According to the CEC, California's 2019 fuel sales totaled 15,365 million gallons of gasoline and 3,720 million gallons of diesel.[59]

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[50] California Energy Commission (CEC). 2020. Electricity Generation by County. Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed September 22, 2021.

[51] California Department of Finance (CDF). 2021. E-4 Population Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. Website: https://dof.ca.gov/forecasting/Demographics/estimates/estimates-e4-2010-2021/. Accessed April 11, 2022.

[52] California Energy Commission (CEC). 2020. "Oil Supply Sources to California Refineries." Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed July 21, 2021.

[53] California Energy Commission (CEC). 2019. "Foreign Sources of Crude Oil Imports to California 2018." March. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports. Accessed July 21, 2021.

[54] California Energy Commission (CEC). 2020. "Oil Supply Sources to California Refineries." Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed July 21, 2021.

[55] United States Department of Energy, Alternative Fuels Data Center. 2020. "Alternative Fueling Station Locator [Interactive Database]." Website: https://afdc.energy.gov/stations/#/find/nearest. Accessed July 21, 2021.

[56] United States Energy Information Administration (EIA). 2020. Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2019. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf. Accessed August 20, 2021.

[57] United States Energy Information Administration (EIA). 2020. Table F16: Total Petroleum Consumption Estimates, 2019. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_pa.pdf. Accessed August 20, 2021.

[58] United States Energy Information Administration (EIA). 2020. Table F18: Natural Gas Consumption Estimates, 2019. Website: https://www.eia.gov/state/seds/seds-data-fuel.php?sid=CA#NaturalGas. Accessed August 20, 2021.

[59] California Energy Commission (CEC). 2019. 2010-2019 CEC-A15 Results and Analysis. Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed September 13, 2021.

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and SB 32. Conventional gasoline and diesel may be replaced, depending on the vehicle's capability, with transportation fuels including hydrogen, biodiesel, and electricity. Currently, 44 public hydrogen refueling stations exist in California; however, none are in the City.[60,61] Currently, 10 public biodiesel refueling stations are in California, with none in the City.[62]

Electric Vehicles

Electricity can be used to power electric and plug-in hybrid electric vehicles (EVs) directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicle's batteries. Fuel cells are being explored to use electricity generated onboard the vehicle to power electric motors. Currently, California has 13,048 EV charging stations.[63] According to the United States Department of Energy's (DOE) Alternative Fuels Data Center, Napa County has 172 EV charging stations at 65 charging locations.[64]

Project Site

The project site is currently vacant and does not consume any fuels.

3.6.3 - Regulatory Framework

International

United Nations Climate Change Framework Convention

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

Western Climate Initiative (Western North America Cap-and-Trade Program)

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Each emitter caps carbon dioxide emissions from power plants, auctions carbon dioxide emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and

[60] United State Department of Energy (DOE). Alternative Fuels Data Center. 2020. Alternative Fueling Station Locator [Interactive Database]. Website: https://afdc.energy.gov/stations/#/find/nearest. Accessed July 21, 2021.
[61] United State Department of Energy (DOE). Alternative Fuels Data Center. 2020. Alternative Fueling Station Counts by State. June. Website: https://afdc.energy.gov/stations/states. Accessed July 21, 2021.
[62] Ibid.
[63] United States Department of Energy (DOE). No Date. Alternative Fuels Data Center: Electric Vehicle Charging Station Locations. Website: https://afdc.energy.gov/fuels/electricity_locations.html#/analyze?region=US-CA&fuel=ELEC&ev_levels=all. Accessed July 21, 2021.
[64] Department of Energy (DOE) Alternative Fuels Data Center. 2020. Electric Vehicle Charging Station Locations. Website: https://afdc.energy.gov/fuels/electricity_locations.html#/analyze?country=US&location_mode=address&location=Solano%20County. Accessed September 22, 2021.

build a clean energy economy. The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce North America GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Québec. Currently only California and Québec are participating in the Cap-and-Trade Program.[65]

Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of 5 percent against 1990 levels over the 5-year period from 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2°C above preindustrial levels, subject to a review in 2015. The Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 heads of state and government, and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Paris Climate Change Agreement

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a 4-year negotiating round, the treaty ended the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. For the first time, this included requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

[65] Center for Climate and Energy Solutions (C^2ES). 2015. Multi-State Climate Initiatives. Website: http://www.c2es.org/us-states-regions/regional-climate-initiatives. Accessed May 19, 2021.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties, or "COP 21." Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly will not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC.[66]

On June 1, 2017, President Trump announced the decision for the United States to withdraw from the Paris Agreement.[67] However, on January 20, 2021, President Biden signed the instrument to bring the United States back into the Paris Agreement that same day. Nonetheless, California remains committed to combating climate change through programs aimed to reduce GHGs.[68]

Federal

Massachusetts et al. v. EPA (U.S. Supreme Court GHG Endangerment Ruling)

Massachusetts et al. v. EPA (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the United States Environmental Protection Agency (EPA) regulate four GHGs, including CO_2, under Section 202(a)(1) of the Clean Air Act (CAA). A decision was made on April 2, 2007, in which the Supreme Court found

[66] Center for Climate and Energy Solutions (C^2ES). 2015a. Outcomes of the U.N. Climate Change Conference. Website: http://www.c2es.org/international/negotiations/cop21-paris/summary. Accessed May 19, 2021.

[67] The White House. Statement by President Trump on the Paris Climate Accord. Website: https://it.usembassy.gov/statement-president-trump-paris-climate-accord/. May 19, 2021.

[68] California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-emission Vehicles. Website: https://ww2.arb.ca.gov/news/california-and-china-team-push-millions-more-zero-emission-vehicles. Accessed May 19, 2021.

that GHGs are air pollutants covered by the CAA. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations; and
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed under "Clean Vehicles" below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling which upheld the EPA Administrator findings.

United States Consolidated Appropriations Act (Mandatory GHG Reporting)

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 MT or more per year of GHG emissions are required to submit annual reports to the EPA. The first annual reports for the largest emitting facilities, covering calendar year 2010, were submitted to EPA in 2011.

United States Clean Air Act Permitting Programs (New GHG Source Review)

The EPA issued a final rule on May 13, 2010, which establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Code of Federal Regulations, the EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps

addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Energy Independence and Security Act

The Energy Policy Act of 2005 created the Renewable Fuel Standard program. The Energy Independence and Security Act of 2007 expanded this program by:

- Expanding the Renewable Fuel Standard program to include diesel in addition to gasoline;
- Increasing the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022;
- Establishing new categories of renewable fuel, and setting separate volume requirements for each one; and
- Requiring EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

This expanded Renewable Fuel Standard program lays the foundation for achieving substantial reductions of GHG emissions from the use of renewable fuels, reducing the use of imported petroleum, and encouraging the development and expansion of the nation's renewable fuels sector.

Signed on December 19, 2007, by President George W. Bush, the Energy Independence and Security Act of 2007 (EISA) aims to:

- Move the United States toward greater energy independence and security.
- Increase the production of clean renewable fuels.
- Protect consumers.
- Increase the efficiency of products, buildings, and vehicles.
- Promote research on and deploy greenhouse gas capture and storage options.
- Improve the energy performance of the federal government.
- Increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EISA reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423 and introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards.

The EPA is committed to developing, implementing, and revising both regulations and voluntary programs under the following subtitles in EISA, among others:

- Increased Corporate Average Fuel Economy Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration[69]

EPA and National Highway Traffic Safety Administration Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards Final Rule

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. The law has become more stringent over time. On May 19, 2009, President Barack Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

The EPA and the NHTSA issued final rules on a second phase joint rulemaking, establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012.[70] The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleet wide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon if achieved exclusively through fuel economy improvements.

The EPA and NHTSA issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

[69] United States Environment Protection Agency (EPA). Summary of the Energy Independence and Security Act. Website: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. Accessed May 19, 2021.

[70] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. EPA-420-F-12-051. August.

The State of California has received a waiver from the EPA to have separate, stricter Corporate Average Fuel Economy Standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the State's energy needs and promote energy efficiency, AB 1575 created the CEC in 1975.

State

California Assembly Bill 32: Global Warming Solutions Act and Scoping Plan

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The ARB is the State agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007.[71] Therefore, to meet the State's target, emissions generated in California in 2020 were required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a business-as-usual (BAU) scenario were estimated to be 596 MMT CO_2e, which do not account for reductions from AB 32 regulations.[72] At that rate, a 28 percent reduction was required to achieve the 427 MMT CO_2e 1990 inventory. In October 2010, the ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. The 2020 inventory without the benefits of adopted regulation is now estimated at 545 MMT CO_2e. Therefore, under the updated forecast, a 21.7 percent reduction from a BAU scenario is required to achieve 1990 levels.[73]

The State has made steady progress in implementing AB 32. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 to show progress achieved to date.[74] The State also achieved its target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target. Also shown are the average reductions

[71] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed May 19, 2021.

[72] California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed May 19, 2021.

[73] California Air Resources Board (ARB). 2014. GHG 2020 Business-as-Usual Emissions Projection. Website: https://ww2.arb.ca.gov/ghg-bau. Accessed August 3, 2021.

[74] California Air Resources Board (ARB). 2014. California Greenhouse Gas Emissions for 2000 to 2012—Trends of Emissions and Other Indicators. Website: http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf. Accessed May 19, 2021.

needed from all Statewide sources (including all existing sources) to reduce GHG emissions back to 1990 levels.

- **1990:** 427 MMT CO_2e (AB 32 2020 Target)
- **2000:** 463 MMT CO_2e (an average 8 percent reduction needed to achieve 1990 base)
- **2010:** 450 MMT CO_2e (an average 5 percent reduction needed to achieve 1990 base)
- **2020:** 545 MMT CO_2e BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base)

The ARB's initial Climate Change Scoping Plan (Scoping Plan) contained measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.[75] The Scoping Plan identified recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector had a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewables energy mix of 33 percent;
- Developing a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS; and
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the ARB's Cap-and-Trade Program. The Scoping Plan states that the inclusion of these emissions within the Cap-and-Trade Program would help ensure that the year 2020 emission targets were met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve sufficient reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions limits and requirements were provided as a margin of safety by accounting for additional GHG emission reductions.[76]

[75] California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed May 19, 2021.

[76] California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed May 19, 2021.

The Cap-and-Trade Program remains a key element of the Scoping Plan. It sets a Statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest cost options to reduce emissions. The program conducted its first auction in November 2012. Compliance obligations began for power plants and large industrial sources in January 2013. Other significant milestones include linkage to Québec's cap-and-trade system in January 2014 and starting the compliance obligation for distributors of transportation fuels, natural gas, and other fuels in January 2015.[77]

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 Statewide emission limit would not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by the ARB in the First Update:

> The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.[78]

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

> The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives

[77] California Air Resources Board (ARB). 2015. ARB Emissions Trading Program. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/guidance/cap_trade_overview.pdf Accessed May 19, 2021.

[78] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed May 19, 2021.

posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions.

Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.[79]

California Senate Bill 32

The Governor signed SB 32 in September of 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states, "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030." As such, SB 32 lays the foundation for the legislative reduction targets for 2030.

2017 Scoping Plan

The most recent version of the ARB's Scoping Plan, the 2017 Climate Change Scoping Plan Update, addresses the SB 32 targets and was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
   - Achieve 50 percent Renewables Portfolio Standard by 2030.
   - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million Zero-Emission Vehicles (ZEVs) on the roads.
   - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near-ZEVs and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant Reduction Strategy

[79] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed May 19, 2021.

- Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
- Reduce emissions of black carbon 50 percent below 2013 levels by 2030.

6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
   - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
   - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, the ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

California Senate Bill 350: Clean Energy and Pollution Reduction Act

In 2015, the State Legislature approved, and the Governor signed, SB 350, which reaffirmed California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50 percent reduction in the use of petroleum Statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission, the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrified transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.[80]

California Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045. Specifically, SB 100 accelerates previously established RPS goals and requires that the program achieve 50 percent of electricity sourced from renewables by December 31, 2026, 60

[80] California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed May 19, 2021.

percent by December 31, 2030, and 100 percent of electricity sourced from carbon-free sources by December 31, 2045. For clarification, renewable sources, as described herein, includes all renewable sources (e.g., solar, small hydro, wind) but notably omits large-scale hydroelectric and nuclear electricity generation; carbon-free sources include all renewable sources as well as large-scale hydroelectric and nuclear electricity generation.

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.[81]

The standards were to be phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards were to result in an approximately 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards were to result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.[82]

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EVs and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.[83]

California Senate Bill 375: Sustainable Communities and Climate Protection Act

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for

[81] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://www.gsweventcenter.com/GSW_RTC_References/2015_0915_CleanAirStandards_Pavley.pdf. Accessed May 19, 2021.
[82] California Air Resources Board (ARB). 2011. Facts About the Advanced Clean Cars Program. November 9.
[83] California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures.

reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

California Senate Bill 1368: Emission Performance Standards

In 2006, the State Legislature adopted SB 1368, which the Governor subsequently signed into law. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities of 1,100 lb. CO_2 per megawatt-hour (MWh).

California Senate Bill X7-7: Water Conservation Act

This 2009 legislation directed urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this Statewide goal of 20 percent decrease in demand would have resulted in a reduction of almost 2 million acre-feet in urban water use in 2020.

California Air Resources Board Truck and Bus Regulation

As part of the ARB's Sustainable Freight Strategy, the ARB adopted the Truck and Bus Regulation. The latest amendments to the Truck and Bus Regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses had to meet particulate matter (PM) filter requirements as of January 1, 2012. Lighter and older heavier trucks had to be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

This regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[84]

California Air Resources Board Advanced Clean Trucks Rule

To further advance the State's Sustainable Freight Strategy, the ARB adopted the Advanced Clean Trucks (ACT) Rule in July 2020, which requires manufacturers of vehicle class 2b through vehicle class

[84] California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed September 22, 2017.

8 trucks to begin meeting escalating in-State ZEV sales from 2024 through 2035. By 2035, the ACT Rule will require 55 percent of trucks class 2b through class 3 to be ZEVs, 75 percent of trucks class 4 through class 8 to be ZEVs, and 40 percent of truck tractors to be ZEVs. [85] Complementary to the ACT Rule, and as discussed further below, Executive Order N-79-20 set a goal of 100 percent of all in-State drayage truck sales to be ZEVs by 2035 and 100 percent of all in-State heavy-duty vehicle sales to be ZEVs by 2045.The ARB is also in process of developing an Advanced Clean Fleet (ACF) Rule to accelerate the ACT Rule by requiring 100 percent of all in-State sales to be ZEVs in 2040 for class 2b through class 3 trucks, class 4 through class 8 vocational trucks, and class 7 through class 8 tractor trucks. The ACF Rule would also provide a clear timeline for requirements for phasing in in-State ZEV sales targets through 2040.[86]

California Code of Regulations Title 20: Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

California Code of Regulations Title 24: Energy Efficiency Standards

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.

California Code of Regulations Title 24: California Green Building Standards Code

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Standards Code (CALGreen) that became effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction ordinances and defers to them as the ruling guidance, provided that they provide a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum

[85] California Air Resources Board (ARB). 2021. Advanced Clean Trucks Fact Sheet. Website: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet. Accessed April 8, 2022.

[86] California Air Resources Board (ARB). 2022. Path to Zero Emission Trucks FAQ. Website: https://ww2.arb.ca.gov/resources/documents/path-zero-emission-trucks-faq. Accessed April 8, 2022.

standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen (California Code of Regulations [CCR] Title 24, Part 11) requires:

- **Short-term bicycle parking**. If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- **Long-term bicycle parking**. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- **Designated parking**. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **Recycling by Occupants**. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (5.410.1).
- **Construction waste**. A minimum 65 percent diversion of construction and demolition waste from landfills. (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- **Wastewater reduction**. Each building shall reduce the generation of wastewater by one of the following methods:
    1. The installation of water-conserving fixtures or
    2. Using nonpotable water systems (5.303.4).
- **Water use savings**. 20 percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- **Water meters**. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- **Irrigation efficiency**. Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- **Materials pollution control**. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particleboard (5.404).
- **Building commissioning**. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

California Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by the AB 1881 Water Conservation Act. The Ordinance required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with the SB X7-7 2020 mandate were required. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

California Public Utilities Code

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers receive safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

California Executive Order B-55-18 (GHG Emissions Reduction Targets)

On September 10, 2018, former California Governor Jerry Brown issued Executive Order B-55-18, which established the following GHG emissions reduction target:

By 2045, California shall achieve carbon net neutrality.

Executive Order B-55-18 identifies that new Statewide goal is to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net neutrality emissions thereafter. This emissions goal is in addition to the existing targets established by Executive Orders S-3-05 and B-30-15 and SB 32, as described in greater detail below. This Executive Order also directs the ARB to work with other State agencies to identify and recommend measures to achieve this goal.

California Executive Order S-01-07: Low Carbon Fuel Standard

The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandated that a Statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established an LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels.

California Executive Order N-79-20

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent ZEVs by 2035, where feasible. While in-state sales of EVs will increase through 2045, the State does not currently have legislation which will restrict or preclude the use of fossil-fueled vehicles by or after 2045.

California Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy was adopted, which is the ". . . first Statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

California Executive Order B-30-15

On April 29, 2015, the Governor issued an Executive Order to establish a California GHG emissions reduction target of 40 percent below 1990 levels by 2030. The Governor's Executive Order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO_2e. The Executive Order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Executive Order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

California Senate Bill 97 and the California Environmental Quality Act Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

The 2010 California Environmental Quality Act (CEQA) Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the CEQA Guidelines, which focuses on energy conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

The most recent 2018 CEQA Amendments expanded upon the previous guidance by specifying that:

- The lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to Statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and State regulatory schemes.
- In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

The 2010 changes to CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively, remained unchanged by the 2018 CEQA Amendment. The cumulative impact discussion requirement (CEQA Guidelines § 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

Under CEQA Guidelines Section 15064.4(b), a lead agency should consider the following factors, among others, when determining the significance of impacts from GHG emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

CEQA Guidelines Section 15183.5 continues to permit programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

CEQA emphasizes that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (see CEQA Guidelines § 15130(f)).

Center for Biological Diversity v. California Department of Fish and Wildlife (California Supreme Court GHG Ruling)

In a November 30, 2015 ruling, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project concluded that assessing whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible approach for assessing significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25–27 of the ruling to address this issue, as summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location (p. 25).
- **Compliance with Regulatory Programs or Performance Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities. (See Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.'].)" To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a Statewide . . . plan for the reduction or mitigation of greenhouse gas emissions' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions']) (p. 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or

greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (p. 26).

Compliance with Local Air District Thresholds. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (p. 27).

Regional

Plan Bay Area 2040

As required by SB 375, the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) are jointly tasked with developing a Sustainable Communities Strategy (SCS) as part of its Regional Transportation Plan (RTP) development. The SCS integrates transportation, land use, and housing for the region to help the State meet its GHG legislative reduction targets. Plan Bay Area 2040 further integrates the region's SCS, RTP, and Regional Housing Need Allocation (RHNA) into a single regional plan. Plan Bay Area 2040 contains several goals for the region to attain ranging in focus from climate protection to adequate housing to open space and agricultural preservation.

Local

City of American Canyon Energy Efficiency Climate Action Plan

The proposed project is within the jurisdiction of the City of American Canyon, which has adopted an Energy Efficiency Climate Action Plan (EECAP) as discussed above in the Regulatory Framework section. The EECAP outlines a course of action to reduce community wide GHG emissions generated within the City of American Canyon. The EECAP includes two measures to reduce energy-related emissions from new nonresidential projects: (1) Participation in PG&E's Savings by Design program for nonresidential construction programs and (2) incorporation of energy efficiency improvements beyond Title 24 for new nonresidential construction. The City would impose the requirements of these measures as applicable through the project Conditions of Approval. It should be noted that the EECAP does not meet the standards required by the BAAQMD to be tiered from under CEQA Guidelines Section 15183.5.

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address climate change and reduce the community's GHG emissions at the local level and improve energy efficiency and conservation. Under Resolution 2021-60, the General Plan was updated September 7, 2021, to include additional climate change and adaptation policies. The following objectives and policies from the City's General Plan are relevant to GHG emissions and energy conservation:

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e.: businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.2 Encourage the clustering of residential structures.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design requirements, the City shall balance energy-efficient design with good planning principles.

Policy 8.23.2 Require that new City buildings be energy efficient.

Objective 8.24 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policy 8.24.1 Cooperate with local utilities to provide energy conservation information to the public.

Policy 8.24.2 Develop public and/or public-private energy conservation educational programs for City employees and the public.

Objective 8.25 Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.

Policy 8.25.1 Introduce concepts of energy efficiency and lifecycle costing to City planning and operating decisions and to the design of all major City facilities.

Policy 8.25.2 Work with other agencies and utility companies to develop safe, economical and renewable energy resources.

Policy 8.25.3 Consider participating in energy conservation demonstration projects and promoting the use of treatment technologies that provide for the reuse of waste and water treatment by products, such as sludge and methane gas.

In addition to the above General Plan policies related to GHG emissions and energy consumption, the City adopted a Climate Emergency Proclamation on November 16, 2021.

3.6.4 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to the emissions of greenhouse gases and energy consumption are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA, such as AB 32 and SB 32. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do for this project. Thus, the proposed project would have significant effects if the project would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Impact GHG-1).

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases (Impact GHG-2).

c) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (Impact GHG-3).

d) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Impact GHG-4).

Significance Criteria

Impact GHG-1: GHG Emissions Generation

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site GHG emissions principally consist of exhaust emissions from

heavy-duty construction equipment. Off-site GHG emissions would occur from motor vehicle exhaust from material delivery vehicles and construction worker traffic.

Neither the City of American Canyon nor the 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, construction of the proposed project is presumed to not interfere with the implementation of SB 32. Nonetheless, the BAAQMD, in their 2017 CEQA Air Quality Guidelines, states that lead agencies are encouraged to incorporate Best Management Practices (BMPs) to reduce GHG emissions during construction, as feasible and applicable.

The use of GHG-reducing construction BMPs is considered by the City to be a pragmatic and effective approach for the control of construction-related GHG emissions. The BAAQMD, in their 2017 CEQA Air Quality Guidelines, specifically mention the following pragmatic and effective construction BMPs for reducing GHG emissions:

- The use of alternative fueled construction vehicles and equipment for at least 15 percent of the fleet.
- The use of local building materials for at least 10 percent of materials uses.
- The recycling and reuse of at least 50 percent of construction and demolition waste materials.

The incorporation of feasible and applicable GHG-reducing construction BMPs serves herein as the basis for whether project construction would contribute its "fair share" of GHG emission reductions consistent with the legislative reduction targets codified by SB 32 and the State's long-term climate goal of carbon neutrality by 2045, thereby resulting in a less than significant impact. As explained below in the discussion of the approach for assessing the significance of the proposed project's operational emissions, the California Supreme Court, in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) (62 Cal.4th 204, 220-223), explained that an approach by which a lead agency ascertains a proposed project's "fair share" of required Statewide GHG reductions is a legitimate approach for formulating significance thresholds for GHG emissions. Under this approach, which here is focused on the proposed project incorporating BAAQMD-recommended BMPs for construction-related emissions, the proposed project would be considered to result in a potentially significant impact if project construction would not incorporate feasible and applicable GHG-reducing construction BMPs including, at a minimum, those listed above.

Operation

The BAAQMD is currently updating their GHG significance thresholds and is expected to adopt new significance thresholds in 2022. The BAAQMD's proposed 2022 significance thresholds for land use projects are listed below. If a land use development project cannot demonstrate consistency with Criterion A or Criterion B, then that project would result in a potentially significant impact related to GHG emissions.

A. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).
B. Projects must include, at a minimum, the following project design elements.

a. Buildings:
    i. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
    ii. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
b. Transportation:
    i. Achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2.
    ii. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
        1. Residential projects: 15 percent below the existing VMT per capita.
        2. Office projects: 15 percent below the existing VMT per employee.
        3. Retail projects: no net increase in existing VMT.

The BAAQMD's GHG significance thresholds from their 2017 CEQA Air Quality Guidelines were established based on meeting the 2020 GHG targets set forth in the AB 32 Scoping Plan.[87] AB 32 required that Statewide GHG emissions be reduced to 1990 levels by 2020. SB 32 extended California's GHG reduction programs beyond 2020 and contains language to authorize the ARB to achieve a Statewide GHG emission reduction of at least 40 percent below 1990 levels by December 31, 2030. The ARB approved the 2017 California's Climate Change Scoping Plan update.[88] The 2017 Scoping Plan Update outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels.

Because the proposed project would be constructed after 2020, the BAAQMD's GHG significance thresholds from their 2017 CEQA Air Quality Guidelines would be inappropriate to use in determining whether the proposed project could result in potentially significant impacts related to meeting the 2030 GHG emission reduction targets codified by SB 32. For land use development projects, the BAAQMD is proposing that lead agencies use one of the approaches endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the State's long-term climate goals.[89] As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less than significant impact on climate change under CEQA. This approach, endorsed by the *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) court decision, evaluates whether a project's GHG emissions are cumulatively considerable based on "their effect on the state's efforts to meet [those] goals." (*Center for*

[87] California Air Resources Board (ARB). 2008. Climate Change Scoping Plan. December. Website: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed June 11, 2021.
[88] California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. Website: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf. Accessed June 11, 2021.
[89] Bay Area Air Quality Management District (BAAQMD). 2022. Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. February. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/~/media/ffb719cfa04a438d9c7be10007a5abdf.ashx. Accessed April 4, 2022.

Biological Diversity v. Department of Fish & Wildlife [2015] 62 Cal.4th at p. 221.) If a project would contribute its "fair share" of what will be required to achieve those long-term climate goals, then a reviewing agency can find that the impact would not be significant because the project will help to solve the problem of global climate change (62 Cal.4th at pp. 220-223).

If a new land use project would serve California's pressing need to provide housing, jobs, and related infrastructure in a manner that supports achieving those climate goals, then the project would help to solve the climate change problem, and its GHG emissions should not be treated as cumulatively considerable. As the Supreme Court held, "consistency with meeting [those] Statewide goals [is] a permissible significance criterion for project emissions" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th at p. 220), and an agency's "choice to use that criterion does not violate CEQA" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th at p. 223). This approach is based on the principle inherent in CEQA that an individual project would make a less than cumulatively considerable contribution if it would do its part to address the cumulative problem. As the Supreme Court explained, "if a plan is in place to address a cumulatively problem, a new project's incremental addition to the problem will not be 'cumulatively considerable' if it is consistent with the plan and is doing its fair share to achieve the plan's goals" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th at p. 223). Given that the problem is the result of such numerous and diverse emission sources, no individual project needs to or could solve the entire cumulative problem by itself. However, each individual project does need to do what is required of it to ensure that the overall solution is implemented, and if it does that, then its impacts on climate change can be treated as less than cumulatively considerable. As the Supreme Court put it in the climate context, "[t]o the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall greenhouse gas reductions necessary [to achieve the State's climate goals], one can reasonably argue that the project's impact is not cumulatively considerable, because it is helping to solve the cumulative problem" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th at p. 220).

The *Center for Biological Diversity v. Department of Fish & Wildlife* court case was decided in 2015, and it specifically addressed only the AB 32 goal of attaining 1990 emission levels by 2020 Statewide, not the longer-term goal for carbon neutrality in 2045. However, it is now past the 2020 goal horizon and the focus of State climate legislation and Statewide and local reduction targets have since shifted to longer-term goals. The Supreme Court has recognized the necessity and appropriateness of using these longer-term goals as the basis for the CEQA analysis. As it held in *Cleveland National Forest Foundation v. SANDAG*, these longer-term goals express "what scientific research has determined to be the level of emissions reductions necessary to stabilize the climate by midcentury and thereby avoid catastrophic effects of climate change" (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th 497, 513).[90]

Although the 2045 carbon neutrality goal is set forth in an Executive Order and not in a statute, as with the 2020 AB 32 goal that the Supreme Court addressed in *Center for Biological Diversity*, the Executive Order B-55-18 goal is appropriate to use for developing a threshold of significance given

[90] These statements were referring to Executive Order S-3-05, which included an 80 percent reduction target by 2050, but they equally apply to the more recent Executive Order B-55-18, which includes a carbon neutrality target by 2045.

the science supporting it. The Supreme Court explicitly rejected the argument that an Executive Order cannot be used for this purpose because it has not been adopted by statute in the *SANDAG* case. The Court explained that the Executive Order at issue there "expresses the pace and magnitude of reduction efforts that the scientific community believes is necessary to stabilize the climate. This scientific information has important value to policymakers and citizens in considering the emission impacts of a project" (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th at p. 515). Agencies are required to design their CEQA analyses "based to the extent possible on scientific and factual data," and if an Executive Order best embodies the current state of the scientific and factual data, an agency may use it as the basis for its CEQA analysis (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th at p. 515).

In developing the their proposed 2022 GHG significance thresholds, the BAAQMD analyzed what will be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045, thereby better representing what design elements new land use development projects need to incorporate to sufficiently contribute to achieving the State's goal of carbon neutrality by 2045. As GHG emissions from the land use sector come primarily from building energy use and from transportation, these are the areas that need to be evaluated to determine whether the project can or will be carbon neutral. With respect to building energy use, this can be achieved by replacing natural gas with electric power and by eliminating inefficient or wasteful electricity usage. These strategies will support California's transition away from fossil fuel-based energy sources and will bring the project's GHG emissions associated with building energy use down to zero as SB 100 incrementally requires greater and greater proportions of in-state sales of electricity are generated from renewable and carbon-free sources, ultimately requiring 100 percent of in-state electricity sales to be generated from carbon-free sources by 2045. With respect to transportation, projects need to be designed to reduce project-generated VMT and to provide sufficient EV charging infrastructure to support the adoption of EVs.

As illustrated above in the BAAQMD's proposed 2022 GHG significance thresholds, the draft BAAQMD document recommends that residential and office projects use a threshold of a 15 percent reduction in project-generated VMT per capita compared with existing levels (or other, more current percentage to the extent further analysis shows that a different level of reduction is needed) and providing EV charging infrastructure as specified in the CALGreen Tier 2 standards. If a land use project being designed and built today incorporates the design elements necessary for the project to be carbon neutral by 2045, then it will contribute its "fair share" to achieving the State's climate goals, resulting in a less than cumulatively considerable climate impact. Therefore, the proposed 2022 GHG significance thresholds will be utilized to determine whether the proposed project would result in potentially significant impacts related to GHG emissions. Please refer to a copy of the BAAQMD's *Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans* contained in Appendix B for more information supporting the use of these GHG significance thresholds.

Although the BAAQMD has not yet formally adopted these thresholds, the City of American Canyon exercises its discretion as the CEQA lead agency to embrace and adopt the BAAQMD's draft approach, with minor refinements, as being reflective of what the City considers to be the best current thinking on the subject. As the Supreme Court said in (*Center for Biological Diversity v.*

Department of Fish & Wildlife [2015] 62 Cal.4th at p. 228), "[a] lead agency enjoys substantial discretion in its choice of methodology."

The refinements made by the City relate to the manner of dealing with VMT. The BAAQMD proposal does not specify what level of VMT reduction, vis-à-vis a regional average, should be used for an *industrial* project such as the proposed project. Rather, BAAQMD is silent on this subject. The City therefore had to consider how to address this particular issue. One option was to consider the approach that BAAQMD is considering with respect to retail projects: to assess whether such projects will result in a *net increase* in existing VMT. A second option was to consider BAAQMD's approach with respect to residential projects: to assess whether such projects will result in 15 percent below the existing regional VMT per capita. And a third option was to consider BAAQMD's approach with respect to office projects: to assess whether such projects will result in VMT 15 percent below the existing VMT per employee.

Because industrial projects more closely resemble office projects than residential projects, and because the BAAQMD approach for office projects is more conservative than the approach for retail projects, the City has conservatively determined that it should use the BAAQMD's proposed approach used for office projects: 15 percent below the existing VMT per employee.

BAAQMD's silence on the issue of how to address VMT with respect to industrial projects is not the only example of a lack of guidance on this subject from expert regulatory agencies. Neither CEQA Guidelines Section 15064.3 nor the 2018 *Technical Advisory on Evaluating Transportation Impact in CEQA* published by the Governor's Office of Planning and Research (OPR) provides specific guidance related to industrial land uses. As with the proposed BAAQMD thresholds, OPR's Technical Advisory provides guidance relative to VMT significance criteria for residential, office, and retail uses but does not address industrial land uses.

The majority of trips generated by industrial land uses are typically attributed to employees and heavy-duty vehicles used to transport commercial goods. CEQA Guidelines Section 15064.3(a) states that VMT refers to the amount and distance of *automobile* travel attributable to a project (italics added). The OPR Technical Advisory states that the term "automobile," as used in Section 15064.3(a), refers to on-road passenger vehicles, specifically cars and light trucks; heavy vehicles are not included in the definition.

The legislature's stated intent in abandoning level of service as a metric for transportation-related impacts, as set forth in Public Resources Code Section 21099(b)(1), was to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. The GHG emissions of trips associated with heavy vehicles serving industrial uses are addressed through the implementation of Statewide programs such as the ARB's Sustainable Freight Strategy, which through regulations such as the Truck and Bus Regulation and ACT Regulation will transition a larger and larger portion of heavy-duty trucks operating within California to be electric through 2050. Additionally, heavy-duty vehicle trips associated with industrial land uses would occur regardless of the available modes of transportation (e.g., walking, bicycling, public transit) or the mix of land uses in the project vicinity. Therefore, limiting the VMT analysis to employee automobile travel is consistent with State policy to reduce GHG emissions from land use decisions and the

availability of alternatives to automobile travel. For these reasons, the City has determined that it is appropriate to employ a VMT metric for GHG analysis based on the proposed BAAQMD approach for office land uses, namely, one focused on employee VMT.

Impact GHG-2: GHG Emissions Reduction Plan Consistency

While the above methodology is employed under Impact GHG-1, which focuses on the proposed project's direct and indirect generation of GHG emissions, Impact GHG-2 methodology for determining whether a potentially significance impact would occur focuses on the proposed project's consistency with the applicable plan adopted for the purpose of reducing GHG emissions. Consistent with the BAAQMD's CEQA Air Quality Guidelines, for this impact to be less than significant, the proposed project must demonstrate consistency with the applicable GHG emissions reduction plan. As such, the proposed project would be determined to conflict with the applicable GHG emissions reduction plan if it would not adhere to applicable GHG reduction measures and policies included in the City's General Plan and EECAP, the MTC/ABAG Plan Bay Area 2050, and the ARB's 2017 Scoping Plan.

Impact GHG-3: Wasteful, Inefficient, or Unnecessary Energy Consumption

The methodology employed under Impact GHG-3, which focuses on determining whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources, follows the guidance provided in Appendix F of the CEQA Guidelines as well as the analytical precedent set by *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th 63, 164-168).

According to Appendix F of the CEQA Guidelines, the goal of conserving energy is translated to include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. In *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th at pp. 164-168), the Appellate Court concluded that the analysis of wasteful, inefficient, and unnecessary energy consumption was not adequate because it did not consider whether additional renewable energy features can be added to the project.

The proposed project would be considered to result in a potentially significant impact if it would result in wasteful, inefficient, or unnecessary consumption of energy resources. Considering the guidance provided by Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th at pp. 164-168, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Impact GHG-4: Renewable Energy and Energy Efficiency Plan Consistency

Similar to the impact discussion under Impact GHG-2, this impact discussion focuses on project consistency with a local plan or policy adopted for the purpose of improving energy efficiency or reliance on renewable energy sources. The impact discussion under Impact GHG-2 differs from this impact discussion in that Impact GHG-2 explores project consistency with relevant policies intended to reduce GHG emissions, which often encompass energy efficiency and renewable energy measures. Impact GHG-4, by contrast, focuses on project consistency with relevant policies intended to improve energy efficiency and encourage the use of renewable energy sources. Therefore, while both Impact GHG-2 and Impact GHG-4 will discuss project consistency with the City's General Plan and EECAP, Impact GHG-4 focuses solely on policies applicable to energy consumption. As such, the proposed project would be determined to conflict with the applicable energy efficiency or renewable energy plan if it would not adhere to applicable energy consumption related measures included in the City's General Plan and EECAP.

Approach to the Analysis

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was developed in collaboration with the South Coast Air Quality Management District and other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential GHG emissions associated with construction and operation from various land uses. The modeling used to support this analysis follows BAAQMD guidance where applicable from its CEQA Air Quality Guidelines.

At the time of this analysis, the construction of Phase 1 of the proposed project was anticipated to begin in early 2022 and be completed 10 months later. Construction of Phase 2 of the proposed project was expected to begin immediately following the completion of Phase 1 construction and be completed 10 months later. In general, this analysis also included estimated project trip generation and trip length provided by W-Trans (Appendix H). As the proposed project is a speculative warehouse development which could accommodate cold storage and accompanying Transport Refrigeration Units (TRU), this analysis considers two project scenarios: a cold warehouse project scenario and a dry warehouse project scenario. Where appropriate, both project scenarios are presented herein to determine project impacts.

Construction-Related GHG Emissions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from both on-site and off-site activities. On-site emissions consist of exhaust emissions from the activity levels of heavy-duty construction equipment and motor vehicle operation. Off-site emissions result from motor vehicle exhaust from hauling and vendor trucks and worker traffic.

Construction emissions are generally calculated as the product of an activity factor and an emission factor. The activity factor for construction equipment is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or the amount of fuel consumed in a given amount of time. The emission factor relates the process activity to the amount

of pollutant emitted. Examples of emission factors include grams of emissions per VMT and grams of emissions per horsepower-hour. The operation of a piece of equipment is tempered by its load factor, which is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

Operation-Related GHG Emissions

The operational-phase emissions are based on the development of the proposed industrial park. The modeling accounts for the average daily vehicle and truck trips and VMT, energy usage, water demand, and wastewater and solid waste generation. For purposes of this analysis, hours of operation for the proposed project are 24 hours per day, 7 days per week.

Transportation

On-road transportation sources are based on passenger vehicle and truck trip generation rates and VMT provided in the Traffic Impact Study (TIS) prepared by W-Trans for the proposed project (see Appendix H). According to the VMT information provided therein, which is based on regional demographic information, the proposed project would result in an average employee daily VMT of 16.24 miles. Please refer to the TIS in Appendix H for more information regarding the methodology behind determining the proposed project's average employee daily VMT. As this VMT would represent all travel to and from the project site for employees in addition to any other destinations those employees will travel to and from each day, an average of 8.12 miles per one-way vehicle trip was conservatively utilized in this analysis to estimate associated emissions from employee passenger vehicle activity. However, as provided in the TIS, the proposed project would also generate truck traffic for deliveries and shipments. As indicated by the project applicant, the most likely port of origin for freight deliveries and shipments would be the Port of Oakland, approximately 32.8 miles from the project site. Therefore, truck travel distances utilized in emission estimates contained in this analysis were assumed to be 32.8 miles per trip.

Furthermore, the proposed project would include locomotive operations beginning with operation of Phase 1. The quantity and frequency of rail shipments to the project site are currently unknown; therefore, various assumptions are utilized in this analysis to characterize future operations. For instance, according to the United States Bureau of Transportation Statistics, the average weight of a loaded railcar ranges from 63 to 67 tons;[91] therefore, for the purposes of this analysis, a loaded railcar being shipped to the proposed project is assumed to weigh 65 tons on average. Assuming an average travel distance of 50 miles and an average loaded railcar weight of 65 tons,[92] this would represent nearly two loaded, 20-railcar locomotive deliveries per week. Please refer to the locomotive emissions estimations contained in Appendix B for more details.

[91] United States Bureau of Transportation Statistics. 2012. Railcar Weights. Website: https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2003/chapter_02/railcar_weights#:~:text=The%20average%20weight%20of%20a,trends%20among%20selected%20freight%20commodities. Accessed July 29, 2021.

[92] United States Department of Transportation, Bureau of Transportation Statistics. 2012. Railcar Weights. Website: https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2003/chapter_02/railcar_weights#:~:text=The%20average%20weight%20of%20a,trends%20among%20selected%20freight%20commodities. Accessed August 2, 2021.

CalEEMod, Version 2020.4.0 was used to quantify passenger vehicle emissions using vehicle emission rates based on vehicle emissions data obtained from the ARB's EMFAC2017 Version 1.0.3 web database and adjusted based on methodology provided in Appendix B of the CalEEMod User's Guide.[93] The passenger vehicle trips were assumed to be distributed among the light-duty auto (LDA), light-duty truck 1 (LDT1), light-duty truck 2 (LDT2), and medium-duty vehicle (MDV) EMFAC2007 vehicle categories proportional to that respective vehicle category's share between those four passenger vehicle categories within the CalEEMod for Napa County.

Truck and TRU emissions were calculated utilizing the ARB's EMFAC2017 Version 1.0.3 and OFFROAD web databases, respectively, and adjusted based on methodology provided in Appendix B. Please refer to the fleet mix adjustment calculations contained in Appendix B for more details.

Other Operational Emissions

Solid Waste Disposal

Indirect emissions from waste generation are based on the CalEEMod default solid waste generation rates, which are based on data from the California Department of Resources, Recycling, and Recovery (CalRecycle).

Water/Wastewater

GHG emissions from this sector are associated with the embodied energy used to supply water, treat water, distribute water, and then treat wastewater and fugitive GHG emissions from wastewater treatment. Indoor water consumption is based on CalEEMod default indoor water use rates.

Area Sources

Area sources are based on the CalEEMod defaults for use of consumer products and landscaping equipment.

Energy

Emissions from this sector are from use of natural gas for space and water heating and electricity use for lighting and power needs at the proposed buildings.

Stationary Sources

Stationary sources are based on the anticipated stationary source equipment included in the proposed project. Given the type and size of the proposed project, the project applicant anticipates the use of a back-up diesel generator and diesel-fueled fire pump for each of the proposed buildings; however, the exact specifications for this equipment are unknown at the time of this analysis. To account for potential operational emissions generated from the non-emergency use of this equipment, the proposed project was assumed to include three back-up diesel generators and three diesel-fueled fire pumps, each assumed to be rated at 50 horsepower and operate for a 4-hour maintenance period one day per month, totaling an estimated 48 hours of operation per year.

[93] California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2020.4.0 Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

3.6.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

Greenhouse Gas Emissions

Impact GHG-1:	**The proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

Impact Analysis

Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. On-site construction activities would vary depending on the level of construction activity.

Long-term, operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, any fugitive refrigerants from air conditioning or refrigerators, and the operation of any proposed stationary sources such as back-up generators or fire pumps.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section measures the proposed project's incremental contribution to the cumulative environmental impact. The following is a discussion of the proposed project's contribution to GHG emissions during both the construction and operation phases.

Construction

As previously discussed, neither the City nor the BAAQMD has thresholds of significance for construction-related GHG emissions; therefore, the incorporation of feasible and applicable GHG-reducing construction BMPs, including but not limited to those listed above, serves herein as the basis for whether project construction would contribute its "fair share" of GHG emission reductions consistent with the legislative reduction targets codified by SB 32 and the State's long-term climate goal of carbon neutrality by 2045. As such, the proposed project would be considered to result in a potentially significant impact if project construction would *not* incorporate feasible and applicable GHG-reducing construction BMPs including those recommended by the BAAQMD. The BAAQMD-recommended GHG-reducing construction BMPs are listed below:

- The use of alternative fueled construction vehicles and equipment for at least 15 percent of the fleet.

- The use of local building materials for at least 10 percent of materials uses.
- The recycling and reuse of at least 50 percent of construction and demolition waste materials.

The proposed project's Phase 1 and Phase 2 construction emissions for both dry and cold storage project scenarios are shown in Table 3.6-3. It should be noted that the analysis conservatively assumes that construction would start in January 2022. As vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 3.6-3 should the construction schedule move to later years. Therefore, the construction GHG emissions contained in Table 3.6-3 represent a conservative assessment of project construction emissions.

Table 3.6-3: Construction Greenhouse Gas Emissions

Construction Activity	Calendar Year	Dry Storage Scenario MT CO_2e	Cold Storage Scenario MT CO_2e
Project Phase 1			
Site Preparation	2022	3	3
Grading	2022	70	70
Building Construction[1]	2022	1,591	1,606
Paving	2022	12	12
Architectural Coating	2022	8	8
Project Phase 2			
Site Preparation	2022	3	3
Grading	2022	48	48
Building Construction	2022	294	294
Total 2022 Construction Emissions		**2,029**	**2,044**
Building Construction[1]	2023	1,690	1,705
Paving	2023	13	13
Architectural Coating	2023	11	11
Total 2023 Construction Emissions		**1,714**	**1,729**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
Emission estimates shown above incorporate implementation of Mitigation Measure (MM) AIR-2a and MM AIR-2b.
[1] Cold Storage Scenario Building Construction emission estimates include fugitive refrigerants during the installation of the anticipated refrigeration system.
Source: CalEEMod Output (Appendix B).

As shown above in Table 3.6-3, construction of the proposed project would result in an estimated 2,029 MT CO_2e under a dry storage scenario and 2,044 MT CO_2e under a cold storage scenario in the first analyzed construction year of 2022. Also illustrated above, construction of the proposed project would result in an estimated 1,714 MT CO_2e under a dry storage scenario and 1,729 MT CO_2e under

a cold storage scenario in the second analyzed construction year of 2023. Nonetheless, the proposed project would need to incorporate GHG-reducing construction BMPs for construction impacts to be considered less than significant, including the use of alternative fueled construction vehicles and equipment, the use of local building materials, and the recycling and reuse of construction and demolition waste. As the proposed project would not explicitly incorporate GHG-reducing construction BMPs, such as those listed above, the proposed project would be required to implement MM GHG-1a to reduce construction GHG emissions through the implementation of GHG-reducing BMPs.

Moreover, the primary source for GHG emission generation during construction activities consists of the anticipated construction equipment included in the modeling to support the estimated emissions contained in Table 3.6-3. As GHG emission generation from off-road construction equipment is generally correlated with fuel consumption, the proposed project would be required to utilize alternatively fueled or electric construction equipment as a principal component of MM GHG-1a to reduce construction-generated GHG emissions. Therefore, MM GHG-1a would mandate the use of electric and alternatively fueled equipment for at least 15 percent of the construction fleet, the use of local building materials and contractors for at least 10 percent of all building materials used, and the recycling and reuse of at least 65 percent of construction and demolition waste generated during project construction, consistent with the current CALGreen model construction and demolition waste diversion requirement (see CALGreen Sections 4.408 and 5.408). MM GHG-1a would also require the proposed project to incorporate a variety of feasible and applicable GHG-reducing construction BMPs, such as utilizing local contractors and implementing idling restrictions, in addition to those recommended by the BAAQMD to maximize the potential reduction in construction GHG emissions. MM GHG-1a notably has more construction BMPs than those recommended by the BAAQMD. The project applicant has identified these additional construction BMPs as feasible and applicable means to maximize GHG emission reductions during project construction; therefore, MM GHG-1a incorporates additional BMPs beyond those recommended by the BAAQMD to further the proposed project's contribution to its "fair share" in GHG emission reductions during construction toward the State's long-term climate goal of carbon neutrality by 2045.

In addition, as shown in Table 3.6-3, project construction could generate up to 2,044 MT CO_2e per year during project construction before mitigation, or a potential total of 3,773 MT CO_2e for total project construction before mitigation. As shown in Table 3.6-4 and discussed further below, project operation could generate up to 21,360 MT CO_2e per year before mitigation targeting GHG emissions. As is customary in GHG emissions analyses, emissions are analyzed over an assumed lifetime of the proposed project. Considering a 30-year lifetime of project operations, construction GHG emissions amortized over 30 years would equate to an estimated 126 MT CO_2e per year, constituting approximately 0.6 percent of annual project GHG emissions. As project construction would constitute a small proportion of overall project GHG emissions, and with the incorporation of feasible and applicable GHG-reducing construction BMPs, the proposed project is considered to contribute its "fair share" of GHG emission reductions during construction consistent with the legislative reduction targets codified by SB 32 and the State's long-term climate goal of carbon neutrality by 2045. Therefore, with the implementation of MM GHG-1a, project construction impacts would be less than significant with mitigation.

Operation

The proposed project would contribute to global climate change through direct and indirect emissions of GHGs from mobile sources (e.g., passenger vehicles, trucks, locomotives), energy (e.g., on-site natural gas consumption and purchased electricity), water use and wastewater generation, and solid waste generation. All modeling parameters utilized in the Air Quality analysis are also utilized for this GHG analysis, including but not limited to trip generation rates, trip distances, building sizes and operations, energy consumption, water consumption, and waste generation. Please refer to Appendix B for modeling results and detailed calculations.

The GHG emissions associated with full operation of the proposed project for operational years 2023 and 2030 are shown in Table 3.6-4, which incorporates implementation of MMs AIR-2c and AIR-2d. Under a dry storage scenario, the proposed project is estimated to generate approximately 18,266 MT CO_2e/year starting in 2023. Under a cold storage scenario, the proposed project is estimated to generate approximately 21,360 MT CO_2e/year starting.

Table 3.6-4: Operational GHG Emissions

Source	Dry Storage Scenario	Cold Storage Scenario
	Year 2023	
	MT CO_2e/year	
Area	0	0
Fugitive Refrigerants	–	903
Energy–Electricity	895	2,292
Energy–Natural Gas	443	487
Mobile–Passenger Vehicles	2,517	2,517
Mobile–Trucks	13,175	13,175
Mobile–Locomotives	66	66
Mobile–TRUs	–	751
Waste	677	677
Water	493	493
Totals	**18,266**	**21,360**

Notes:
BAAQMD = Bay Area Air Quality Management District
CO_2e = carbon dioxide equivalent
MT = metric tons
TRU = Transport Refrigeration Unit
Manual summation of the sources may not equal to the Total due to rounding. Emission estimates shown above incorporate implementation of MM AIR-2c and MM AIR-2d.
Source: CalEEMod Version 2020.4.0; Appendix B.

As previously discussed, the BAAQMD's proposed 2022 GHG significance thresholds represent a method for determining whether the proposed project would be cumulatively considerable or

whether the proposed project contributes to solving the cumulative problem of climate change, taking into consideration the State's long-term climate goal of carbon neutrality by 2045. As such, the BAAQMD's proposed 2022 GHG significance thresholds reflect California's current short-term climate goal of reducing Statewide emissions by 40 percent below 1990 levels by 2030 as well as California's long-term climate goal of achieving carbon neutrality by 2045. Therefore, the proposed project is analyzed herein against the BAAQMD's proposed 2022 GHG significance thresholds to determine whether potentially significant impacts related to GHG emissions would occur.

As previously discussed, the BAAQMD's proposed 2022 GHG significance thresholds identifies two pathways for determining consistency with the State's climate goals: demonstrating project consistency with a qualified GHG reduction strategy under CEQA Section 15183.5(b), or ensuring that the proposed project incorporates design and operational features that support the region and State's adoption of EVs, facilitate reductions in project-generated VMT, and preclude the use of legacy emission sources such as natural gas. The BAAQMD's proposed 2022 GHG significance thresholds for land use projects are listed below. As noted above, the City has modified them only as necessary to address VMT from industrial projects, a subject on which the BAAQMD was silent. If the proposed project cannot demonstrate consistency with Criterion A or Criterion B, then the proposed project would result in a potentially significant impact related to GHG emissions.

A. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).
B. Projects must include, at a minimum, the following project design elements.
    a. Buildings:
        i. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
        ii. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
    b. Transportation:
        i. Achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2.
        ii. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
            1. Residential projects: 15 percent below the existing VMT per capita.
            2. Office projects: 15 percent below the existing VMT per employee.
            3. Retail projects: no net increase in existing VMT.

Criterion A

As previously mentioned, the City's EECAP does not meet the requirements to be considered a qualified GHG reduction strategy capable of being tiered from under CEQA Guidelines Section 15183.5(b). Therefore, the proposed project is not capable of satisfying Criterion B from the above

2022 GHG significance thresholds and must demonstrate consistency with the provisions of Criterion A to determine a less than significant impact related to GHG emissions. As illustrated above, Criterion A contains four notable provisions, against which the proposed project is analyzed herein.

Criterion B

Natural Gas Prohibition Provision

The first provision requires that the proposed project not include natural gas plumbing and instead relies on electricity as the primary building energy source. As the proposed project's design does not specifically include the prohibition of natural gas plumbing, MM GHG-1b would be required to ensure that no natural gas plumbing be built into the design of the proposed project.

It should be noted that the emission estimates contained in Table 3.6-4 do not reflect the prohibition of natural gas plumbing and conservatively includes GHG emissions generated from the on-site combustion of natural gas for space and water heating. As shown therein, the proposed project could generate up to 443 MT CO2e per year under a dry storage scenario or up to 487 MT CO2e per year under a cold storage scenario if future tenants require natural gas for critical operations. The proposed project would be compliant with this provision with the incorporation of MM GHG-1b.

Wasteful, Inefficient, or Unnecessary Electricity Consumption Provision

The second provision of the BAAQMD's proposed 2022 GHG significance thresholds requires that electricity consumption would not be considered wasteful, inefficient, or unnecessary. As discussed in greater detail under Impact GHG-3, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. However, this provision specifically refers to electricity consumption as opposed to the consumption of general energy resources. The proposed project would be required to be constructed compliant with the California Building Code Title 24 requirements, which requires that new buildings be designed to accommodate future rooftop solar systems among other energy conservation and energy efficiency standards. As such, the proposed project would be designed to accommodate the future use of on-site renewable energy and would not by design preclude the use of EVs or renewable energy sources. Moreover, MM GHG-1b would require the proposed project to prohibit the use of natural gas during project operation, thereby reducing project dependence on fossil fuels and removing legacy GHG emission sources in contributing to achieving the State's long-term climate goal of carbon neutrality by 2045.

Nonetheless, the proposed project could consume up to an estimated 24,495,402 kWh electricity per year during operation, as discussed in greater detail under Impact GHG-3, and the proposed buildings would be constructed to at least the minimum energy efficiency standards contained in the California Building Code. Moreover, until California's electricity grid is 100 percent generated from renewable and carbon-free sources in 2045, the proposed project's electricity consumption would result in additional demand of fossil fuel resources for electricity generation. As such, MM GHG-1c would be required to increase the energy efficient standards met for the proposed buildings, thereby minimizing the potentially wasteful, inefficient, or unnecessary consumption of electricity, and MM GHG-1d would be required to reduce project reliance on fossil fuels for electricity consumption until the State's electricity grid achieves 100 percent carbon-free status in 2045 under SB 100. MM GHG-1c would require the proposed buildings to be designed and built to meet the Tier 2 energy

efficiency requirements of the Nonresidential Voluntary Measures of the California Building Code, and MM GHG-1d would require the proposed project to source its electricity consumption from 100 percent carbon-free sources. Therefore, after incorporation of MM GHG-1c and MM GHG-1d, the proposed project's design would not result in building electricity consumption that is wasteful, inefficient, or unnecessary.

Electric Vehicle Charging Infrastructure Provision

The third provision of the BAAQMD's proposed 2022 GHG significance thresholds requires that the proposed project achieve compliance with the EV charging infrastructure standards contained in the Tier 2 requirements of CALGreen. Because the proposed project does not currently involve a site design which demonstrates compliance with the Tier 2 requirements of CALGreen's EV charging infrastructure standards, MM GHG-1e would be required to ensure project compliance with this provision. MM GHG-1e would require that the proposed parking areas are designed and will be built to accommodate EV charging stations. At a minimum, the parking shall be designed to accommodate a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2. Considering that trucking activities constitute a major operational activity for the proposed project, the Tier 2 EV charging infrastructure requirements contained in MM GHG-1e would apply to both passenger automobiles as well as trucks. Loading docks would also be required under MM GHG-1e to contain 240-volt outlets to accommodate EV and TRU charging while trucks are loading or unloading goods. The inclusion of MM GHG-1e would ensure that the proposed project meets the provision requiring compliance with the Tier 2 EV charging infrastructure of CALGreen. MM GHG-1e would also further reduce the potential for the wasteful, inefficient, or unnecessary consumption of energy resources from automobiles by supporting the region and State's adoption of EVs and reducing reliance on fossil fuels. Therefore, with incorporation of MM GHG-1e, the proposed project would be compliant with this provision.

Vehicle Miles Traveled Provision

Lastly, the fourth provision of the BAAQMD's proposed 2022 GHG significance thresholds requires a 15 percent decrease below existing VMT per capita for residential projects, a 15 percent decrease below existing VMT per employee for office projects, and a no net increase in existing VMT for retail projects. As the proposed project would be a logistics center, none of these VMT reduction requirements directly apply. As explained above, the City has therefore chosen to formulate a VMT formula specific to industrial uses—15 percent below existing regional average for employees. With this project-specific formula/threshold in mind, the TIS prepared by W-Trans for the proposed project.[94] The study found that the proposed project's employees would see a roughly 29 percent reduction in VMT when compared to existing regional VMT. As discussed therein, the region's existing average daily employee VMT is 23 miles while the proposed project's employee VMT would be 16.24 miles. Therefore, the proposed project's employee-generated VMT would conform to the 15 percent reduction requirement formulated by the City based on similar provisions of the BAAQMD's proposed 2022 GHG significance thresholds. Moreover, the State's overarching GHG reduction strategy for the transportation sector for medium and heavy-duty trucks focuses on

[94] W-Trans. 2021. Traffic Impact Study for the Giovannoni Logistics Center. July 22.

making trucks more fuel-efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector, where both per capita VMT reductions and an increase in vehicle efficiency are forecast to be needed to achieve the overall State emissions reductions goals.

Emissions associated with heavy-duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The following State strategies reduce GHG emissions from medium and heavy-duty trucks:

- ARB's Mobile Source Strategy focuses on reducing GHGs by transitioning to zero and low emission vehicles and from medium-duty and heavy-duty trucks.[95]
- ARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25 percent by 2030, deploy over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize both zero and near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.[96]
- ARB's Truck and Bus Regulation requires diesel-fueled trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. [97]
- ARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions and the establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling.[98] While the focus of the Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.

Trucks and truck fleet owners and operators accessing the proposed project would be subject to the above trucking and freight regulations. Thus, these strategies would contribute to controlling heavy-duty truck GHG emissions associated with the proposed project, and the proposed project would not conflict with or inhibit these Statewide strategies. Any on-site trucks would be required to comply with ARB's Heavy-Duty (Tractor-Trailer) GHG Regulation, which requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions. Furthermore, truck manufacturers would be required to comply with the ARB ACT Rule, which requires manufacturers of medium- and heavy-duty trucks and vans to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. Under the ACT Rule, by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b to Class 3 truck sales, 75 percent of Class

[95] California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. November. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed May 17, 2021.

[96] Ibid.

[97] California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed September 22, 2017.

[98] California Air Resources Board (ARB). 2006. Emission Reduction Plan for Ports and Goods Movement in California. April 20. Website: https://bayplanningcoalition.org/downloads/library/Emission_Reduction_Plan_for_Ports_and_Intl_Goods_Movement_in_CA.pdf. Accessed May 17, 2021.

4 to Class 8 straight truck sales, and 40 percent of truck tractor sales.[99] Moreover, as required under Mitigation Measure (MM) AIR-1d, the proposed project would utilize trucks no older than model year 2014, which would provide additional reductions in truck-associated GHG emissions. As the proposed project would not include any feature or design which would prohibit the implementation of these vehicle emission standards, the proposed project would be compliant with this provision.

Considering the above assessment, the project operation would be consistent with the BAAQMD's proposed 2022 GHG significance thresholds. As such, the project operation would have a less than significant impact related to GHG emissions after the incorporation of MM AIR-1d and MMs GHG-1a through MM GHG-1e.

Conclusion

The proposed project would generate GHG emissions during construction and operation. The BAAQMD or City do not have an emissions threshold for determining potentially significant impacts related to construction GHG emissions; therefore, the BAAQMD's recommended GHG-reducing BMPs was utilized as the basis for determining the proposed project's construction-related impact. The proposed project would include the applicable GHG-reducing BMPs during construction through implementation of MM GHG-1a. MM GHG-1a notably has more construction BMPs than those recommended by the BAAQMD. The project applicant has identified these additional construction BMPs as feasible and applicable means to maximize GHG emission reductions during project construction; therefore, MM GHG-1a incorporates additional BMPs beyond those recommended by the BAAQMD to further the proposed project's contribution to its "fair share" in GHG emission reductions during construction toward the State's long-term climate goal of carbon neutrality by 2045. Because MM GHG-1a would require the proposed project to meet and exceed implementation of the BAAQMD-recommended BMPs for reducing construction GHG emissions, project construction would be considered to commit its "fair share" of GHG emission reductions consistent with the State's long-term climate goal of carbon neutrality and would therefore be less than significant.

GHG emissions associated with full operation of the proposed project for the anticipated first operation in 2023 are shown in Table 3.6-4, which incorporates implementation of MMs AIR-2c and AIR-2d. As discussed in Section 3.2, Air Quality, MM AIR-2c would be required to ensure the use of low-VOC (i.e., reactive organic gas [ROG]) architectural coating products that contain no more than 50 grams of VOC per liter of product to reduce the generation of ROG emissions during project operation. Any GHG emissions generated during architectural coating reapplication would be captured under area-source emissions in Table 3.6-4. As shown therein, area-source emissions generated during project operation would be less than 0.5 MT CO_2e per year and was therefore rounded down to zero. As such, MM AIR-2c would result in a negligible effect on operational GHG emission generated by the proposed project.

As discussed in Section 3.2, Air Quality, MM AIR-2d would be required to ensure the trucking fleet accessing the project site would be comprised of vehicles no older than model year 2014 to reduce tailpipe NO_X emissions. Model year 2014 was selected because it is the first homogenous model year

[99] California Air Resources Board (ARB). 2020. Advanced Clean Trucks: Accelerating Zero-Emission Truck Markets. June 25. Website: https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf. Accessed May 17, 2021.

for a trucking fleet in Napa County, based on EMFAC2017 data, to demonstrate a reduction in NO_X emissions when compared with unmitigated emission estimates. This is considered a feasible trucking mitigation measure as the ARB's Truck and Bus Regulation[100] would otherwise require trucks greater than a 26,000-pound gross vehicle weight rating which operate in California to be no older than 2010 model year by the time the proposed project would become operational in 2023. This would allow the proposed project to utilize trucks which are 9 years old and would not constitute an infeasible financial burden.

While the trucking fleet serving the proposed project would represent the greatest GHG emission source during project operation, as illustrated in Table 3.6-4, MM AIR-2d was determined to be the most feasible trucking mitigation to reduce tailpipe emissions of all types, including GHG emissions, due to the size of the trucking fleet. With over 500 trucks accessing the proposed project each day, the financial burden associated with implementing more stringent trucking mitigation is very likely to amount a cost greater than what a "prudent investor" would otherwise bear to develop the proposed project. In addition, the other principal emission source of passenger vehicles would not be possible to mitigate through project design as the operation of privately owned vehicles by employees and visitors would not be under the direct control of the proposed project.

Moreover, as discussed under Impact GHG-1, MMs GHG-1b through GHG-1e would ensure project consistency with the BAAQMD's proposed 2022 GHG significance thresholds, as refined by the City, by prohibiting the use of natural gas infrastructure, complying with the Tier 2 EV charging infrastructure requirements of CALGreen, complying with the Tier 2 energy efficiency standards of CALGreen, and sourcing project electricity consumption from carbon-free sources. In addition, MMs GHG-1b through GHG-1e would reduce the proposed project's reliance on fossil fuels and reduce the potential for the wasteful, inefficient, or unnecessary consumption of energy resources.

Lastly, as discussed further under Impact GHG-1, the proposed project would demonstrate a 15 percent reduction in employee-generated VMT from the region's existing employee VMT, consistent with the BAAQMD's proposed 2022 GHG significance thresholds for VMT reductions for other identified land use types, including office uses, which the City has determined are similar to industrial uses. In addition, the proposed project's trucking operations would be subject to incrementally more stringent tailpipe emission standards and fleet turnover requirements through various ARB programs and rules, further facilitating the use of EVs and reducing the generation of truck-generated GHG emissions. As such, incorporation of MMs GHG-1b through GHG-1e would reduce the proposed project's potentially significant operational impacts related to GHG emissions to a less than significant level.

The proposed project's construction and operational GHG emissions impacts would be considered less than significant.

[100] California Air Resources Board (ARB). 2019. Truck and Bus Regulation Compliance Requirement Overview. June 18. Website: https://www.arb.ca.gov/msprog/onrdiesel/documents/fsregsum.pdf?_ga=2.176823522.653555524.1631722616-611272733.1590599157. Accessed September 16, 2021.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GHG-1a Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating project construction will include the following construction Best Management Practices (BMPs):

- At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric.
- At least 10 percent of building materials used for project construction shall be sourced from local suppliers.
- At least 65 percent of construction and demolition waste materials shall be recycled or reused.
- At least one contractor that has a business location in American Canyon shall be contracted for project construction.
- All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered.
- Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product.
- Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions 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 mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The Bay Area Air Quality Management District (BAAQMD) phone number shall also be identified and visible to ensure compliance with applicable regulations.

MM GHG-1b Prior to the issuance of any building permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating the proposed project is designed without the use of any natural gas -fueled appliances or natural gas plumbing.

MM GHG-1c Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed buildings are designed and will be built to, at a minimum, the Tier 2 advanced energy efficiency requirements of the Nonresidential Voluntary Measures of the California Green Building Standards Code, Division A5.2, Energy Efficiency, as outlined under Section A5.203.1.2.2.

MM GHG-1d Prior to issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that the proposed parking areas for passenger automobiles and trucks are designed and will be built to accommodate electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to accommodate a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.

Prior to the issuance of any building permits, the project applicant shall demonstrate to the satisfaction of the City of American Canyon (e.g., shown on-site plans), that each loading dock is each outfitted with at least one 240-volt outlet to accommodate truck and Transport Refrigeration Unit (TRU) charging and/or electrical power connection while trucks are loading and unloading goods.

MM GHG-1e Prior to the issuance of any building permit for the proposed project, the project applicant shall provide the City with documentation (e.g., site plans) demonstrating to the City's satisfaction that the electricity demand will be supplied with 100 percent carbon-free electricity sources through the year 2045.

Level of Significance After Mitigation

Less than significant impact.

Conflict with Plan, Policy, or Regulation that Reduces Emissions

Impact GHG-2:	**The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.**

Impact Analysis

The following discusses project consistency with applicable plans adopted to reduce GHG emissions, including ARB's 2017 Scoping Plan, MTC/ABAG Plan Bay Area 2040, and the City of American Canyon EECAP.

California Air Resources Board Scoping Plan

The principal State plan and policy for GHG emission reduction targets are set forth in Executive Order S-03-05, AB 32, and the subsequent SB 32. The quantitative goal of AB 32 was 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. SB 32 then accelerated the GHG emission reduction goals of AB 32. The 2017 Scoping Plan Update, the most recent update to the ARB Scoping Plan, 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. It applies to State agencies but is not directly applicable to cities, counties, or individual projects (i.e., the Scoping Plan does not require the City to adopt policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the State agencies outlined in the Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other Statewide actions that affect a local jurisdiction's emissions inventory from the top down.

Transportation Sector

Trucks

In general, the State strategy for the transportation sector for medium and heavy-duty trucks focuses on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector, where both per capita VMT reductions and an increase in vehicle efficiency are forecast to be needed to achieve the overall State emissions reductions goals.

Emissions associated with heavy-duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The following State strategies reduce GHG emissions from medium and heavy-duty trucks:

- ARB's Mobile Source Strategy focuses on reducing GHGs by transitioning to zero and low emission vehicles and from medium-duty and heavy-duty trucks.[101]
- ARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25 percent by 2030, deploy over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize both zero and near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.[102]
- ARB's Truck and Bus Regulation requires diesel-fueled trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.[103]
- ARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions and the establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling.[104] While the focus of the Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.

[101] California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. November. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed May 17, 2021.
[102] Ibid.
[103] California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed September 22, 2017.
[104] California Air Resources Board (ARB). 2006. Emission Reduction Plan for Ports and Goods Movement in California. April 20. Website: https://bayplanningcoalition.org/downloads/library/Emission_Reduction_Plan_for_Ports_and_Intl_Goods_Movement_in_CA.pdf. Accessed May 17, 2021.

The proposed project would be subject to the above trucking and freight regulations. Thus, these strategies would contribute to controlling heavy-duty truck GHG emissions associated with the proposed project. The proposed project would not conflict with or inhibit these Statewide strategies. Any on-site trucks would be required to comply with ARB's Heavy-Duty (Tractor-Trailer) GHG Regulation, which requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions. Furthermore, truck manufacturers would be required to comply with the ARB ACT Rule, which requires manufacturers of medium- and heavy-duty trucks and vans to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. Under the ACT Rule, by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b to Class 3 truck sales, 75 percent of Class 4 to Class 8 straight truck sales, and 40 percent of truck tractor sales.[105] As the proposed project would not include any feature or design which would prohibit the implementation of these vehicle emission standards, the proposed project would be consistent with these requirements.

Passenger Vehicles

Statewide strategies to reduce GHG emissions from passenger vehicles and the transportation sector in general include the LCFS and changes in the Corporate Average Fuel Economy Standards (e.g., Pavley I and Pavley California Advanced Clean Cars program). Furthermore, Executive Order N-79-20 would also require that 100 percent of new passenger cars and trucks sold in California be zero-emission by 2035, which would indirectly contribute to the extent of EV utilization in the proposed project's passenger vehicle fleet beyond 2035. As the proposed project would not include any feature or design which would prohibit the implementation of these vehicle emission standards, the proposed project would be consistent with these requirements.

Energy Sector

As shown in Table 3.6-4, energy use generated by the proposed project represents the second largest source of emissions after considering mobile source GHG emissions. As discussed under Impact GHG-1, MM GHG-1c the proposed project would meet the Tier 2 energy efficiency requirements of the current CALGreen and Building Energy Efficiency Standards. Moreover, the proposed project would be sourcing electricity from on-site generation sources and/or utility providers in the State. As required by MM GHG-1e, any electricity consumed by the proposed project would be from carbon-free sources, such as an on-site photovoltaic system. If the proposed project secures electricity purchases from a utility provider, the proposed project would be required by MM GHG-1e to purchase 100 percent carbon-free electricity through the year 2045, at which time utility providers would be required to supply 100 percent carbon-free electricity for all in-state sales, as required by SB 100. As such, the proposed project would meet the requirements contained in the 2019 California Building Code and would be consistent with the State's current CALGreen and Building Energy Efficiency Standards and the State's renewable energy legislation, SB 100.

[105] California Air Resources Board (ARB). 2020. Advanced Clean Trucks: Accelerating Zero-Emission Truck Markets. June 25. Website: https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf. Accessed May 17, 2021.

Other Sources

Other sources of GHG emissions include solid waste disposal, which is associated with landfilling municipal solid waste. The amount of methane emitted to the atmosphere as a fraction of the total amount of methane generated from the decomposition of accumulated waste has gradually declined over time as more landfills install landfill gas collection and control systems and existing systems are operated more efficiently as a result of ARB's Landfill Methane Control Measure.[106] Therefore, the proposed project would be consistent with the State's goals for the recycling and waste sector.

Metropolitan Transportation Commission Plan Bay Area

As part of the implementing framework for Plan Bay Area 2050, local governments have identified planned development areas to focus growth. The project site is within the Napa County Airport Land Use Compatibility Plan area. Thus, the proposed project would be consistent with the overall goals of Plan Bay Area, which include concentrating new investment in areas that would encourage job growth. In addition, the proposed project would be developed in an area with existing infrastructure. Therefore, the proposed project would generally not conflict with the land use concept plan in Plan Bay Area 2050.

The project site is located approximately 700 feet from State Route (SR) 29. The closest public transit option would be the Vine bus system, operated by the Napa Valley Transportation Authority. The Vine provides transit opportunities throughout Napa County. The closest Vine stop is the American Canyon City Hall bus stop on Napa-Vallejo Connector Route 11, which extends from the Redwood Park n Ride in Napa, CA to the Vallejo Ferry Terminal. The stop is 1.5 miles from the project site. As such, it is not likely that many employees would travel to the project site using public transit.

City of American Canyon Energy Efficient Climate Action Plan

The City of American Canyon adopted its EECAP in 2012.[107] 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. The City would impose the requirements of these measures as applicable through local regulations and ordinances. Table 3.6-6 lists the relevant measures of the City's EECAP and analyzes how the proposed project would conflict or be consistent with the EECAP and the relevant measures therein.

Table 3.6-5: Consistency with American Canyon Energy Efficient Climate Action Plan

Climate Action Plan Measure	Description	Applicability and Compliance
Community Strategy 1. Existing Uses–Nonresidential. 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.		

[106] California Air Resources Board (ARB). 2020. Advanced Clean Trucks: Accelerating Zero-Emission Truck Markets. June 25. Website: https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf. Accessed May 17, 2021.

[107] City of American Canyon. 2012. Energy Efficiency Climate Action Plan. Website: https://www.cityofamericancanyon.org/home/showdocument?id=5024. Accessed May 19, 2021.

Climate Action Plan Measure	Description	Applicability and Compliance
Community Measure C-1: Targeted Energy Efficiency Outreach to Nonresidential Energy Customers.	Use PG&E data to target specific nonresidential 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 Nonresidential Energy Efficiency Checklist.	Build upon the energy disclosure requirements of AB 1103 to develop a voluntary nonresidential 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 nonresidential energy efficiency checklist.
Community Measure C-3: Participate in a Nonresidential Property Assessed Clean Energy (PACE) Program.	Provide additional financing opportunities for energy efficiency improvements for commercial structures by participating in a PACE 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–Nonresidential. 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 Nonresidential Construction.	Require participation in PG&E's Savings by Design Program (or future iterations of such a program) for all new nonresidential 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.[108]
Community Measure C-7: Require Energy Efficiency Beyond State Code for New Nonresidential Construction	Through 2013, provide a streamlined permit process for new nonresidential construction projects that incorporate energy efficiency improvements beyond Title 24, include all items on a voluntary energy efficiency checklist, or include renewable energy 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.)	**Not Applicable.** This measure applies to the City's responsibility to require more stringent energy efficiency standards which exceed the energy efficiency performance experienced under minimal compliance with Title 24 requirements.
Community Strategy 6. Renewable Energy. Increase the number of distributed renewable energy installations on residential and Nonresidential properties to three new nonresidential sites/year and 15 residential sites/year by 2020.		

[108] Pacific Gas and 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.

Climate Action Plan Measure	Description	Applicability and Compliance
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 project would include roof structures designed to accommodate additional weight for rooftop photovoltaic electricity generation panel arrays.
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 project would include water efficient landscaping and water use reduction methods. Moreover, the proposed project anticipates using recycled water for all irrigated lands.[109]
Source: City of American Canyon. 2012. Energy Efficiency Climate Action Plan (EECAP). Website: https://www.cityofamericancanyon.org/home/showdocument?id=5024. Accessed April 7, 2021.		

As shown in Table 3.6-6, the proposed project incorporates features that would contribute to the City's strategy to minimize GHG emissions. With these features, the proposed project 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. Table 3.6-6 analyzes the proposed project's consistency with the 2017 Scoping Plan Update measures. As shown in Table 3.6-6, none of the measures are applicable to the proposed project.

Table 3.6-6: 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 project 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 the Tier 2 energy efficiency standards of the California Building Code through implementation of MM GHG-1c. In addition, the proposed project would source its electricity consumption from 100 percent carbon-free sources, as required by MM GHG-1d.

[109] Balance Hydrologics. 2021. Draft Water Supply Assessment for the Giovannoni Logistics Center Project. September.

2017 Scoping Plan Update Reduction Measure	Project Consistency
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 project 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 ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Not Applicable.** This measure is not applicable to the proposed project; however, vehicles accessing the buildings at the project 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.	**Consistent.** This measure applies to owners and operators of trucks and freight operations. While the proposed project is industrial in nature and would support truck and freight operations, neither the proposed project's design nor nature would prevent truck fleet owners and operators from utilizing zero-emission or near-ZEVs by 2030. Moreover, as required by MM GHG-1e, the proposed project would design and construct all automobile and truck parking areas to meet the Tier 2 EV charging infrastructure requirements of CALGreen. MM GHG-1e would further accelerate the possible adoption of EVs and support this measure.
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**. Black carbon is formed by the incomplete combustion of fossil fuels, wood, and other fuels. Households currently constitute the largest source of black carbon worldwide, primarily originating from the use of biomass and coal cooking and heating stoves.[110] Nonetheless, the proposed project would involve trucking activities. As such, freight vehicles accessing the project site would be required to meet the standards of the ARB's Sustainable Freight Action Plan and Truck and Bus Regulation, which would serve to reduce potential freight-related black carbon emissions resulting from fossil fuel combustion. Therefore, the proposed project would not constitute a major source of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities' strategy for reduction of per capita VMT.	**Not Applicable.** The proposed project does not include the development of a Regional Transportation Plan.

[110] Climate and Clean Air Coalition (CCAC). N.d. Black carbon. Website: https://www.ccacoalition.org/en/slcps/black-carbon. Accessed April 1, 2022.

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 project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the proposed project.
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 project is in a built-up urban area and would not be considered natural or working lands.
Source: California Air Resource Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed May 17, 2021.	

As shown in Table 3.6-6, the proposed project's implementation would not conflict with the reduction measures proposed in SB 32. As such, the proposed project would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Impact GHG-3: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

A significant impact would occur if the proposed project would result in the inefficient, wasteful, or unnecessary use of energy.

Construction

The anticipated construction schedule for the proposed project was assumed to begin in January 2022 and conclude in August 2023, lasting approximately 20 months. If the anticipated construction schedule moves to later years, construction energy demand would likely decrease because of improvements in

technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require site preparation, grading, building construction, architectural coating, and paving activities. Project construction would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., site clearing, and grading), and the actual construction of the building. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during the proposed project's construction could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, front-end loaders, forklifts, and cranes. Construction equipment is estimated to consume a total of 51,911 gallons of diesel fuel during project construction (Appendix B).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emissions Factors model (EMFAC) mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix B. In total, the proposed project is estimated to consume a combined 337,528 gallons of gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Singlewide mobile office trailers, commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 20,152 kilowatt-hours (kWh) during the 20-month construction phase (Appendix B).

The proposed project’s construction is not anticipated to result in unusually high energy use. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. Similarly, compliance with State regulations would limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, the overall construction schedule and process is already designed to be efficient to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operation

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 3.6-7.

Table 3.6-7: Annual Project Energy Consumption

Energy Consumption Activity	Annual Consumption	
	Dry Storage Scenario	Cold Storage Scenario
Electricity Consumption	8,834,476 kWh/year	24,495,402 kWh/year
Natural Gas Consumption	8,260,000 kBTU/year	9,060,000 kBTU/year
Total Passenger Vehicle Fuel Consumption	280,981 gallons/year	280,981 gallons/year
Total Truck Fuel Consumption	971,529 gallons/year	971,529 gallons/year
Total Locomotive Fuel Consumption	537 gallons/year	537 gallons/year
Total TRU Fuel Consumption	–	1,304 gallons/year

Notes:
kBTU = kilo-British Thermal Unit
kWh = kilowatt-hour
TRU = Transport Refrigeration Unit
Locomotive fuel consumption is based on an average monthly delivery capacity of 500,000 ton-miles.
Source: Appendix B

Operation of the proposed project would consume an estimated 24,495,402 kWh of electricity and an estimated 9,060,000 kBTU of natural gas annually under the cold storage project scenario and an estimated 8,834,476 kWh of electricity and an estimated 8,260,000 kBTU of natural gas annually under the dry storage project scenario. As previously discussed, the proposed project would be considered to result in a potentially significant impact if it would result in wasteful, inefficient, or unnecessary consumption of energy resources. Considering the guidance provided by Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th 63, 164-168, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Decreasing Overall Per Capita Energy Consumption

As discussed under Impact GHG-1, the proposed project would result in an approximately 29 percent reduction in employee VMT from regional average estimates. As such, the proposed project would result in an overall decrease in per capita transportation energy consumption with respect to employee transportation energy resources. As discussed under Impact GHG-1, trucking activities envisioned by the proposed project would be generally controlled by new technologies and the mandatory turnover of fleets through medium and heavy-duty truck emission standards and regulations. Moreover, the movement of freight goods and trucking and locomotive travel distances subsequent to that activity is largely dictated by market demand rather than the implementation of a specific development project, such as the proposed project. As such, overall energy consumption

related to trucking and locomotive activities is expected to not change as a result of implementation of the proposed project, and overall energy consumption related to employee transportation would decrease from that experienced by the region's current average employee transportation behavior.

As discussed above in Section 3.6.2, Environmental Setting, the County currently has estimated per capita energy consumption of 7,471 kWh and 28.45 MMBtu per year. The County estimates are utilized herein rather than City estimates because this energy consumption data is not available at the City level. As shown in Table 3.6-7, the proposed project would result in up to 24,495,402 kWh per year and up to 9,060 MMBtu per year under a cold storage scenario starting in 2023 without considering any mitigation. As the proposed project is nonresidential, the number of estimated employees is used herein to identify the proposed project's per capita energy consumption. As the proposed project is expected to generate employment for an estimated 3,643 people, the proposed project would result in a per capita energy consumption of 6,724 kWh per year and 2.49 MMBtu per year, both of which would be below the County's average electricity and natural gas consumption rates.

It should be noted that with implementation of MM GHG-1c, the proposed project is likely to consume less electricity than what is disclosed in Table 3.6-7 due to the required additional energy efficiency improvements and the fact that CalEEMod Version 2020.4.0 assumes minimum energy efficiency design compliance with the 2019 California Building Code. Should the permitting of the proposed project occur after January 1, 2023, the proposed project would be subject to additional energy efficiency standards beyond what is currently required at the time of this analysis. Nonetheless, the proposed project is likely to result in greater electricity consumption than what would otherwise occur as a result of implementation of MM GHG-1b, which would require the proposed project to implement an all-electric building design. Nevertheless, with implementation of MM GHG-1b, the proposed project would reduce natural gas-related energy consumption by 100 percent even if electricity consumption increased, thereby contributing to the overall decrease in per capita energy consumption. Considering the above assessment as well as the fact that the proposed project would result in an overall decrease in per capita building energy consumption before mitigation, the proposed project is considered consistent with this criterion with respect to per capita building energy consumption.

Decreasing Reliance on Fossil Fuels

The proposed project would be considered to conflict with this criterion if it did not take steps to decrease the reliance on fossil fuels. As discussed under Impact GHG-1, the proposed project would be required to implement MMs GHG-1a through GHG-1e to reduce GHG emissions. MMs GHG-1a through GHG-1e would also contribute to greater energy efficiency, the reduction in fossil fuel consumption, and an increase in consumption of renewable energy resources. Specifically focusing on decreased reliance on fossil fuels, MM GHG-1a would require the project applicant to utilize electric and alternatively fueled construction equipment and local contractors, among other requirements, which would reduce the proposed project's commitment of fossil fuel energy resources during project construction. Moreover, MM GHG-1b would require the proposed project to prohibit the installation of natural gas infrastructure, thereby precluding the proposed project's future use of natural gas. Lastly, MM GHG-1d would require the proposed project to source 100

percent of its electricity from carbon-free source, either from installing on-site renewable generation technologies, purchasing eligible renewable electricity services from PG&E or MCE, or a combination thereof. As such, the implementation of MMs GHG-1a, GHG-1b, and GHG-1d would actively promote the proposed project's decreased reliance on fossil fuels through the design and operation of the proposed project. Therefore, the proposed project would be consistent with this criterion with mitigation.

Increasing Reliance on Renewable Energy Sources

As previously discussed, MM GHG-1a would require the project applicant to utilize electric and alternatively fueled construction equipment and local contractors, among other requirements, which would reduce the proposed project's commitment of fossil fuel energy resources during project construction. MM GHG-1a would increase the proposed project's reliance on renewable energy sources during project construction. During operations, the proposed project's buildings would be designed and constructed, consistent with MM GHG-1c, in accordance with the State's Tier 2 Nonresidential Building Energy Efficiency Standards, which are widely regarded as some of the most advanced building energy efficiency standards in the country. In addition, the proposed project would be required under MM GHG-1e to install a greater amount of EV charging infrastructure than what would otherwise be experienced through minimum code compliance.

The proposed project would also include roof structures designed to accommodate additional weight for rooftop photovoltaic panel arrays should they be installed. MM GHG-1d would additionally require that the proposed project source its electricity consumption from carbon-free sources, either with on-site renewable generation technologies or through subscription with a 100 percent carbon-free electricity service with PG&E or MCE. Moreover, MM GHG-1b would require the proposed project to out-right prohibit the use of natural gas during project operation, thereby reducing project dependence on fossil fuels and removing legacy GHG emission sources in contributing to achieving the State's long-term climate goal of carbon neutrality by 2045.

Moreover, MM GHG-1e would require that the proposed parking areas are designed and will be built to accommodate additional EV charging stations than would be required with minimum code compliance. At a minimum, the parking shall be designed to accommodate EV charging stations in an amount equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2. Considering that trucking activities constitute a major operational activity for the proposed project, the Tier 2 EV charging infrastructure requirements contained in MM GHG-1e would apply to both passenger automobile as well as truck parking areas. Loading docks would also be required under MM GHG-1e to contain 240-volt outlets to accommodate EV and TRU charging while trucks are loading or unloading goods. The inclusion of MM GHG-1e would ensure that the proposed project meets the provision requiring compliance with the Tier 2 EV charging infrastructure of CALGreen. MM GHG-1e would further reduce the potential for the wasteful, inefficient, or unnecessary consumption of energy resources from automobiles by supporting the region and State's adoption of EVs and reducing reliance on fossil fuels.

As a result, the proposed project's energy consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant with mitigation.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

MM GHG-1a through MM GHG-1e

Level of Significance After Mitigation

Less than significant impact.

Impact GHG-4: The proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Impact Analysis

A significant impact would occur if the proposed project conflicted with or obstructs a State or local plan for renewable energy or energy efficiency. Therefore, a significant impact would occur if the proposed project were considered inconsistent with applicable plans adopted to promote or improve energy efficiency or renewable energy, including the City's EECAP. In addition, the City's General Plan Natural and Historic and Cultural Resources Element contains several energy efficiency goals that would relate to the proposed project.

The proposed project would be designed in accordance with Title 24, California's Energy Efficiency Standards for Nonresidential Buildings techniques and practices. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. Incorporating the Title 24 standards into the proposed project's design would ensure that the proposed project would not result in the use of energy in a wasteful manner. Furthermore, the proposed project would have roof structures designed to accommodate additional weight for rooftop photovoltaic electricity generation panel arrays, so it is possible that the project could use solar electricity generation. MM GHG-1d would also require the proposed project to source its electricity from 100 percent carbon-free sources, which could include on-site renewable generation technologies such as rooftop solar.

The City's General Plan Natural and Historic and Cultural Resources Element contains policies related to energy conservation that are relevant to the proposed project, such as Goal 8F to reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources. Compliance with Title 24 standards would help the project meet this goal, and implementation of MMs GHG-1a through GHG-1e would further serve to reduce project reliance on nonrenewable energy resources. Moreover, as previously illustrated in Table 3.6-5, the proposed project would be consistent with the energy efficiency measures contained in the EECAP.

The proposed project would comply with existing State energy standards and be consistent with the energy efficiency goals and measures contained in the City's General Plan Natural and Historic and Cultural Resources Element and EECAP. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

3.7 - Hazards and Hazardous Materials

3.7.1 - Introduction

This section describes the existing hazards and hazardous materials setting and the potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on review of the GeoTracker Database and site reconnaissance performed by FirstCarbon Solutions (FCS).

3.7.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: Causes human health effects
- Ignitable: Has the ability to burn
- Corrosive: Causes severe burns or damage to materials
- Reactive: Causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Records Search

FCS performed a query of the California State Water Resources Control Board (State Water Board) GeoTracker Database, which lists reported hazardous materials sites compiled pursuant to Government Code 65962.5 (The Cortese List). These sites include sites where releases have occurred as well as sites that have permitted hazardous materials storage vessels, including underground storage tanks (USTs). The project site was not listed on the GeoTracker Database.

Four sites within 0.5-mile of the project site were listed on the GeoTracker Database and are summarized in Table 3.7-1. All four sites had reported releases of petroleum hydrocarbons into soil and groundwater. All four sites are listed as “Case Closed,” signifying that the regulatory agency with jurisdiction has determined that no further action is necessary.

Table 3.7-1: Recorded Hazardous Materials Sites

Name	Relationship to Project Site	Summary
5747 Highway 29 (Diablo Timber)	200 feet east of the project site	**Case Closed (1998):** An 8,000-gallon gasoline UST and a 6,000-gallon diesel UST were removed in 1993 and evidence of petroleum hydrocarbons was found in nearby soils. Impacted soils were removed and monitoring wells were installed. No groundwater contamination detected. No Further Action Letter issued in 1998.
		Case Closed (2014): As part of a property ownership transfer, a Phase II soil and groundwater investigation was conducted that identified low levels of petroleum hydrocarbons in soil and groundwater. No Further Action Letter issued in 2014.
1500 Green Island Road (Zeneca ICI Resins)	200 feet south of the project site	**Case Closed (2000):** Releases of petroleum hydrocarbons occurred in early 1990s. Low levels were detected in soil, soil vapor, and groundwater. No Further Action Letter issued in 2000.
1554 Green Island Road (Auto Salvage)	2,400 feet west of project site	**Case Closed (2002):** Former auto salvage facility. Petroleum hydrocarbons detected in soil and groundwater. Well purged and abandoned. No Further Action Letter issued in 2002.
4000 Airport Road (Napa County Airport)	2,400 feet north of the project site	**Case Closed (1992):** Leaking UST site. No additional information available. No Further Action Letter issued in 1992.

Notes:
UST = underground storage tank
Source: California State Water Resources Control Board (State Water Board) 2021.

Common Hazardous Materials

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used for acoustic insulation, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air, they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal/OSHA) defines asbestos-containing construction materials as any material that contains more than 0.1 percent asbestos by weight.

There are no structures on the project site. Thus, there is no basis to assume presence of asbestos-containing materials.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably in paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities

to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil. Both the United States Environmental Protection Agency (EPA) and the California Department of Health Services define lead paint as containing a minimum of 0.5 percent by weight. Lead-containing waste materials with a concentration greater than 0.1 percent are considered hazardous waste by California law.

There are no structures on the project site. Thus, there is no basis to assume presence of lead-based paint.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of synthetic chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. Electrical transformers are one of the most common sources of PCBs.

There are no structures or electrical transformers on the project site. Thus, there is no basis to assume presence of PCBs.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The EPA has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l).

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l.

Low-Frequency Electromagnetic Fields

Electrical transmission and distribution lines emit extremely low-frequency electromagnetic fields (EMFs), which have been suspected to be linked to cancer. However, scientific research has never conclusively established a link between EMFs and cancer. In 2007, the World Health Organization issued a report titled “Extremely Low-Frequency Fields, Environmental Health Criteria Monograph No. 238” that concluded that evidence between extremely low-frequency EMFs and childhood leukemia is not strong enough to be considered causal, although it did note that the issue still was of concern. The same report indicated that there is inadequate evidence or no evidence linking low-frequency EMFs and health effects associated with all other diseases.

According to the California Energy Commission, no major electrical transmission lines are located within 0.5-mile of the project site.

Aviation

The Napa County Airport is located 2,400 feet north of the project site. The County-owned airport consists of three runways, ranging from 2,510 to 5,931 feet in length. The airport averages 148 operations per day and 54,020 operations annually. (The Federal Aviation Administration [FAA] defines an "operation" as one takeoff or landing.)

3.7.3 - Regulatory Framework

Federal

Federal Toxic Substances Control Act and Resource Conservation and Recovery Act

The Federal Toxic Substances Control Act of 1976 and the Resource Conservation and Recovery Act of 1976 (RCRA) regulate the generation, transportation, treatment, storage, and disposal of hazardous and non-hazardous waste. The regulatory program is administered by the EPA. It mandates that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The HSWA also prohibited the use of certain techniques for the disposal of some hazardous wastes and provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks and performance standards to ensure that the stored material will not corrode the tanks.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of and response to uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Transportation of Hazardous Materials

The Hazardous Materials Transportation Act of 1974, as amended, is the basic statute regulating hazardous materials transportation in the United States. Transportation of hazardous materials is regulated by the United States Department of Transportation (USDOT) Office of Hazardous Materials Safety. The Office of Hazardous Materials Safety formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials

regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 Code of Federal Regulations Parts 100-185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; instruction on the properties of the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 Code of Federal Regulations Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State

Cortese List

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA). While Government Code Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992 and this information is now largely available on the websites of GeoTracker and EnviroStor. Those requesting a copy of the Cortese "list" are now referred directly to the appropriate information resources contained on the internet web sites (e.g., GeoTracker and EnviroStor).

Handling and Storage of Hazardous Waste

The handling and storage of hazardous materials is regulated on the federal level by the EPA under the CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA). Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500-25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The business plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are

required to prepare a Risk Management Plan and California Accidental Release Plan, which provide information on the potential impact zone of a worst-case release and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by the California Environmental Protection Agency (Cal/EPA) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations, Title 22, Chapter 11, Article 2, Section 66261.10 defines hazardous waste as a substance that may:

> (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed or otherwise managed.

According to California Code of Regulations Title 22, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels. (The level depends on the substance involved.) Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances are hazardous because of their flammable properties. Gasoline, hexane, and natural gas are examples of ignitable substances. Corrosive substances are chemically active and can damage other materials or cause severe bums upon contact. Examples include strong acids and bases such as sulfuric (battery) acid or lye. Reactive substances may cause explosions or generate gases or fumes. Explosives, pressurized canisters, and pure sodium metal (which reacts violently with water) are examples of reactive materials.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents, such as bacteria or viruses.

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a business plan that must include details, including floor plans, of the facility and business conducted at the site, an inventory of hazardous materials that are handled or stored on the site, an emergency response plan, a training program in safety procedures and emergency response for new employees, and an annual refresher course in the same topics for all employees.

The Porter-Cologne Water Quality Act (California Water Code, Section 13000, et seq.) established the authority of the State Water Board and provided the Regional Water Quality Control Board (RWQCB) with the primary responsibility of the protection of water quality in the State of California.

Hazardous Materials Worker Safety

Cal/OSHA and the Federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety by developing and enforcing workplace safety regulations in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR §§ 337-340, Chapter 3.2). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Fire Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code at Part 9. The California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Fire Code requires two points of vehicular access for any nonresidential building 30 feet tall or higher.

California Department of Transportation and California Highway Patrol

The California Vehicle Code Section 31303 requires that hazardous materials be transported via routes with the least overall travel time and prohibits the transportation of hazardous materials through residential neighborhoods. In California, the California Highway Patrol (CHP) is authorized to designate and enforce route restrictions for the transportation of hazardous materials. To operate in California, all hazardous waste transporters must be registered with the California Department of Toxic Substances Control (DTSC). Unless specifically exempted, hazardous waste transporters must comply with the CHP Regulations, the California State Fire Marshal Regulations, and the USDOT Regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code, and the Title 22, Division 4.5, Chapter 13 of the California Code of Regulations, both of which are administered by the DTSC.

San Francisco Bay Regional Water Quality Control Board

There are nine RWQCBs throughout the State. The San Francisco Bay RWQCB has jurisdiction over the City of American Canyon. Individual RWQCBs function as the lead agencies responsible for identifying, monitoring, and cleaning up Leaking Underground Storage Tanks (LUSTs). Storage of

hazardous materials in USTs is regulated by the State Water Board, which oversees the nine RWQCBs.

California State Aeronautics Act

The State Aeronautics Act, Public Utilities Code Section 21001, et seq., is the foundation for the California Department of Transportation (Caltrans) Division of Aeronautics aviation policies. The Division issues permits for and annually inspects hospital heliports and public use airports, makes recommendations regarding proposed school sites within 2 miles of an airport runway, and authorizes helicopter landing sites at/near schools. Aviation system planning provides for the integration of aviation into transportation system planning on a regional, statewide, and national basis. The Division of Aeronautics administers noise regulation and land use planning laws that foster compatible land use around airports and encourages environmental mitigation measures to lessen noise, air pollution, and other impacts caused by aviation. The Division of Aeronautics also provides grants and loans for safety, maintenance, and capital improvement projects at airports.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hazards and hazardous materials:

Goal 1N Ensure the compatibility of development within American Canyon with the Napa County Airport.

Objective 1.27 Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.

Policy

Policy 1.27.2 Review all applications for new development, expansion of existing uses, and re-use within Napa County Airport Compatibility Zones “A” through “E” for compliance with the appropriate use and development conditions.

Goal 6A Maintain a high level of fire protection and emergency services to City/District businesses and residences.

Objective 6.3 Ensure that the Fire District’s facility, manpower and equipment needs keep pace with the City’s growth.

Policy

Policy 6.3.1 Require that City planning staff work closely with Fire District officials to ensure that fie facilities and personnel are expanded commensurably to serve the needs of the City’s growing population and development base.

Policy 6.4.3 Require, through the development review process, that all structures and facilities subject to the District's jurisdiction adhere to City, State, and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.

County of Napa

Napa County Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan (ALUCP) governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The ALUCP was adopted by the Napa County Airport Land Use Commission in April 1991 and revised in December 1999.

Flight Hazards

The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Land use characteristics involve uses that may produce hazards to aviation. Specific characteristics prohibited within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights
- Sources of dust, steam, or smoke that may impair pilot visibility
- Sources of electrical interference with aircraft communications or navigation
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses

Zone D

The ALUCP provides the following description of Zone D in Table 3-1:

> Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective "Airport Impact Areas" figures contained in Part III. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches), a moderate level of risk exists.

The ALUCP establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.

- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.
- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The ALUCP states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D.

3.7.4 - Methodology

FirstCarbon Solutions evaluated potential impacts on hazards and hazardous materials through site reconnaissance, review of the State Water Board GeoTracker Database, and site reconnaissance performed in February 2021.

3.7.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to hazards and hazardous materials are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

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;

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Section 7, Effects Found not to be Significant);

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;

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) result in a safety hazard or excessive noise for people residing or working the project area;

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires (refer to Section 7, Effects Found not to be Significant).

3.7.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1:	**Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and 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.**

Impact Analysis

Phases 1 and 2

The proposed project contemplates the development of a 2.4-million-square-foot logistics center on 163 acres of the project site and the preservation of the remaining 45 acres as open space.

Construction

Construction activities would entail the use of heavy equipment on the project site. Potential hazardous materials transported, used, or disposed of during project construction would be limited to commonly used substances such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents. Construction equipment would be serviced by trained technicians and potentially hazardous materials would be stored in secured facilities. Furthermore, the safe handling of these commonly used substances is governed by occupational health and safety laws and regulations and construction contract requirements. Therefore, the use of this equipment and these substances during construction would not present any undue risks to the public or the environment.

Operation

High-cube warehouse facilities are typically used for distribution, fulfillment, and storage of non-hazardous commodities, goods, and manufactured products. As such, no large quantity hazardous materials users are contemplated as end users.

Project end users would be expected to handle small quantities of commonly used hazardous substances such as cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids, and oil as part of daily operations. Given the small quantities involved and the characteristics of use (e.g., routine maintenance and cleaning), their use would not be considered a potential risk to human

health or the environment. The use of acutely hazardous materials of any quantity that have the potential to result in releases that could potentially expose substantial numbers of people or the environment to harm is not anticipated by project end uses.

Conclusion

In summary, the construction and operational activities of the proposed project would not create a significant hazard to the public or environment. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Government Code Section 65962.5 Sites

Impact HAZ-2:	**The proposed project 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.**

Impact Analysis

Phases 1 and 2

The proposed project contemplates the development of a 2.4-million-square-foot logistics center on 163 acres of the project site and the preservation of the remaining 45 acres as open space.

Cortese List

The project site is not listed on the Cortese List, which includes various hazardous materials databases compiled to Government Code 65962.5.

Four sites within 0.5 mile of the project site are listed on the Cortese List. All are listed as "Case Closed," signifying that the regulatory agency with jurisdiction has determined that no further action is necessary. Thus, they do not pose a risk to human health or the environment.

Agricultural Chemicals

The project site does not support cultivated agriculture. Aerial photographs and historic topographical maps indicate that the project site has not supported cultivated agricultural production. Thus, there is no basis to assume presence of agricultural chemicals, including herbicides and pesticides.

Hazardous Building Materials

The project site does not contain any structures. Aerial photographs and historic topographical maps indicate that the project site has not supported structures. Thus, there is no basis to assume presence of hazardous building materials including asbestos, lead, or PCBs.

Radon

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l.

Moreover, the proposed project proposes slab-on-grade construction, which has a low susceptibility to radon intrusion. In contrast, buildings with subsurface spaces such as basements or parking garages have a much higher susceptibility to radon intrusion.

Electromagnetic Fields

There are no high voltage electrical facilities within 0.5 mile of the project site. As such, the proposed project site would not be exposed to high levels of low-frequency EMFs.

Conclusion

The proposed project would not be exposed to hazards or hazardous materials from past uses of the project site. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Airports

Impact HAZ-3:	**The proposed project may create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.**

Impact Analysis

Phases 1 and 2

The 208-acre project site is located 2,400 feet south of the Napa County Airport and is within Zone D of the Napa County Airport Land Use Compatibility Plan.

Although, as explained in Section 3.5.6 of this Draft Environmental Impact Report (Draft EIR), the California Supreme Court, in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377, has held generally "agencies subject to CEQA generally are *not* required to analyze the impact of existing environmental conditions on a project's

future users or residents," the Court recognized that the Legislature has created an exception with respect to noise, safety, and land use compatibility issues near airports (*Id*. at p. 391). Public Resources Code Section 21096[a] creates special rules for EIRs prepared for projects either "situated within airport land use compatibility plan boundaries" or, where no such plan is in place, "within two nautical miles of a public airport or public use airport." Such EIRs must use "the Airport Land Use Planning Handbook" published by the Division of Aeronautics of the Department of Transportation as a technical resource.

The Napa County Airport Land Use Compatibility Plan states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D. In addition, uses that are hazardous to flight are prohibited (i.e., features that attract large numbers of birds and are sources of smoke, glare, distracting lights, or electrical interference). The ALUCP encourages clustering to maximize open land areas and requires limits on building envelopes and building heights on all development plans within 100 feet of approach zones.

The proposed project's end uses are all nonresidential and are acceptable within Zone D.

Finally, there are no project attributes that would produce sources of smoke, glare, distracting lights, or electrical interference. Therefore, the proposed project complies with the applicable safety requirements of Zone D. As such, the proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Emergency Response and Evacuation

Impact HAZ-4:	**The proposed project would not impair emergency response or evacuation in the project vicinity.**

Impact Analysis

Phases 1 and 2

The proposed project would take vehicular access from multiple driveways on Green Island Road and Devlin Road. Phase 1 would have four driveways of Green Island Road and three driveways on Devlin Road. Reciprocal access would be provided between the two Phase 1 buildings. Accordingly, the proposed project would provide two points of emergency access and, thus, would comply with California Fire Code requirements.

For these reasons, the proposed project would enhance access by emergency responders and would not impair emergency response or evacuation in the project vicinity. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

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3.8 - Hydrology and Water Quality

3.8.1 - Introduction

This section describes the existing hydrology and water quality setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on a Preliminary Hydrologic and Hydraulic Modeling Memo, prepared by Balance Hydrologics, provided in Appendix F. Additional information was obtained through site reconnaissance, review of project plans, and review of resources, including the City of American Canyon General Plan, the California Department of Water Resources (DWR) Bulletin 118, the Clean Water Act 303(d) list, and the Western Regional Climate Center.

3.8.2 - Environmental Setting

Climate and Meteorology

The City of American Canyon is characterized by a Mediterranean climate with warm summers, mild winters, and moderate precipitation. Temperatures in American Canyon range from an average monthly low of 38.3°F (degrees Fahrenheit) in January to an average monthly high of 82.1°F in September. Average annual rainfall is 24.6 inches with the majority occurring from November to March. General meteorological data for the American Canyon area, as measured at the Napa State Hospital weather station, are presented in Table 3.8-1.

Table 3.8-1: American Canyon Meteorological Summary

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	
January	38.3	57.0	5.14
February	40.8	61.5	4.38
March	42.0	65.0	3.35
April	43.7	69.6	1.65
May	47.6	74.6	0.68
June	51.3	79.8	0.21
July	53.4	81.9	0.02
August	53.2	81.7	0.06
September	51.5	82.1	0.31
October	47.9	76.5	1.36
November	42.6	65.9	2.98
December	38.8	57.6	4.50
Annual Average	**45.9**	**71.1**	**24.66**

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	

Notes:
Averages derived from measurements taken between January 1, 1893, and June 10, 2016, at Napa State Hospital (WRCC ID# 046074).
Source: Western Regional Climate Center 2021.

Regional Hydrology

The project site is located within the 426-square-mile Napa River Watershed. The Napa River drains 47 tributaries along its 55-mile length from the headwaters of Mount St. Helena in the Mayacamas Mountain Range at approximately 3,700 feet above mean sea level to San Pablo Bay, part of San Francisco Bay.

Within the large Napa River Watershed, major land cover types are forest (35 percent), grassland/rangeland (23 percent), and agriculture (19 percent). The San Francisco Bay Regional Water Quality Control Board (RWQCB) indicates that two-thirds of the agricultural land is vineyards, and urban development covers approximately 8 percent of the watershed. The majority of streams in the Napa Valley have been altered by urbanization, agriculture, and grazing. Since the 1800s, large sections of the Napa River have been straightened, the banks hardened, flows redirected, and several levees constructed.

At a more local scale, the project site has a contributing watershed area of 650 acres, measured where No Name Creek leaves the northwest corner of the site. Site drainage and the watershed boundary have been heavily influenced by the construction of ditches, roadway embankments, and other development. It is plausible that an additional area east of State Route 29 (SR-29) contributes runoff to the project site; however, this area does not affect the hydrology of the development footprint because it is either (1) routed through the drainage channel along Airport Road (which will not be affected by the project), or (2) routed through the undeveloped land to the south of the project site (also unaffected by the project). The watershed is not part of one of the larger, regional watersheds used for stormwater master planning.

Storm Drainage

The project site is undeveloped and does not have any existing storm drainage facilities. Runoff either ponds on-site and percolates into the soil or sheet flows into the municipal storm drainage facilities within Green Island Road.

Surface Water Quality

The Napa River is listed as impaired on the Clean Water Act 303(d) list for pathogens and sediment/siltation. These pollutants are a result of agriculture, urban runoff, and storm sewers; land development; and construction. The Napa River was previously listed on the Clean Water Act 303(d) list for nutrients; however, the RWQCB de-listed the Napa River for this pollutant in 2014 (Resolution Number R2-2014-0006).

Groundwater

The project site is located within the 40,500-acre Napa-Sonoma Lowlands Groundwater Subbasin. The subbasin consists primarily of alluvium and alluvial fans that were deposited at and near the mouths of the Napa River and Sonoma Creek adjacent to San Pablo Bay. To a lesser extent, portions of the City are underlain by sandstone and mudstone/shale, of which the former comprises some of the more productive water-bearing units within the region. The City of American Canyon does not maintain any municipal groundwater wells; however, as many as 41 private wells have been identified that draw from the subbasin within and near the City. Nearly all of these wells reported relatively low-flow rates, ranging from 0.5 gallon per minute (gpm) to 45 gpm.

Groundwater Quality

Groundwater quality in the Napa-Sonoma Lowlands Subbasin is generally suitable for municipal and agricultural uses. Primary constituents of concern are high total dissolved solids (TDS), nitrate, boron, and organic compounds. High TDS are typically found in wells in areas closest to the San Francisco Bay. The DWR indicates that the Napa-Sonoma Lowlands Subbasin shows a TDS range of 50 to 300 milligrams per liter (mg/L) with an average of 185 mg/L.

Geology and Soils

Napa County lies within the Coast Range of California, formed at and near the boundary of two major tectonic plates—the North American and Pacific plates. The lower Napa Valley can generally be considered a down-warped basin, the depth of which has been accentuated by additional down-faulting. The oldest rocks in the area, exposed along the flanks of the valley, are the sedimentary units of the Cretaceous-period Great Valley sequence. These units were originally part of the intact, overriding (North American) plate that were uplifted after the plate margin changed from a subduction zone to a transform fault, approximately 25 million years ago. The Great Valley sequence, in turn, is overlain by shales, sandstones, and siltstones of early to mid-Tertiary period. These sedimentary units were deformed and, in some places, moderately metamorphosed as a result of the uplift of the region. Thick deposits of late-Tertiary-period volcanic material, primarily tuff and rhyolite, cover the sedimentary units throughout much of the valley, as far south as Suscol Canyon. The Napa Valley floor is composed of Quaternary-period sediments, deposited on the Napa River floodplain and in alluvial fans built-up at tributary mouths along the base of the valley flanks.

The project site is located near the southern end of the Napa Valley, at the distal end of the younger alluvial fan deposits that emanate from the hills to the east of the site. Young alluvial silt and clay floodplain and tidal deposits are also present at the site, deposited by the nearby Napa River.

The vast majority of the project site is underlain by Clear Lake clay and small areas of Haire loam, 2-9 percent slopes; and Fagan clay loam, 5-15 percent slopes. These soils are classified as hydrologic soils group D, meaning they have high runoff potential and very low infiltration rates, particularly when thoroughly wetted.

3.8.3 - Regulatory Framework

Federal

Clean Water Act

Section 303 of the Clean Water Act (CWA) requires states to adopt water quality standards for all surface waters of the United States. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards (see description of the Porter-Cologne Water Quality Control Act, below). Standards are based on the designated beneficial use(s) of the water body. Where multiple uses exist, water quality standards must protect the most sensitive use.

Section 401 of the CWA requires any person applying for a federal permit or license that may result in the discharge of pollutants into waters of the United States (including wetlands) to obtain a state water quality certification. In California, such certifications are administered by the California State Water Resources Control Board (State Water Board) through the nine RWQCBs (see a description of state regulations below). In order to acquire certification, it must be demonstrated that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit by a federal agency may be granted until 401 certification has been granted. Section 401 water quality certifications are typically required prior to obtaining a Section 404 permit from the United States Army Corps of Engineers (USACE).

Section 402 of the CWA mandates that certain types of construction activity comply with the requirements of National Pollutant Discharge Elimination System (NPDES) stormwater program. In California, any construction activity (with the exception of certain industrial activities, none of which are proposed for this project) that disturbs at least 1 acre is covered under the Construction General Permit issued by the State Water Board and implemented and enforced by RWQCBs.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of American Canyon are regulated under the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, MS4 Order No. 2013-0001-DWQ (General Permit). In 1987, Congress amended the CWA to mandate controls on discharges from municipal separate storm sewer systems (MS4s). Acting under the federal mandate and the California Water Code, California RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, "Post-Construction Stormwater Management Program," mandates municipalities to require specified features and facilities—to control pollutant sources, runoff volumes, rates, and durations and to treat runoff before discharge from the site—be included in development plans of projects that create or replace 5,000 square feet or more impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 requires all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals to demonstrate that their project complies with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This Permit provision requires that stormwater discharges not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

Section 404 of the CWA requires that a permit be obtained from the USACE prior to any activity associated with discharge of dredged or fill material into waters of the United States, including wetlands.

Floodplains

The Federal Emergency Management Agency (FEMA) oversees floodplains and administers the National Flood Insurance Program (NFIP) adopted under the National Flood Insurance Act of 1968. The program makes federally subsidized flood insurance available to property owners within communities who participate in the program. Areas of special flood hazard (those subject to inundation by a 100-year flood) are identified by FEMA through regulatory flood maps titled Flood Insurance Rate Maps. The NFIP mandates that development cannot occur within the regulatory floodplain (typically the 100-year floodplain) if that development results in more than a 1-foot increase in flood elevation. In addition, development is not allowed in delineated floodways within the regulatory floodplain.

Federal Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to do the following:

- Avoid incompatible floodplain development,
- Be consistent with the standards and criteria of the NFIP, and
- Restore and preserve natural and beneficial floodplain values.

Executive Order 11990 requires federal agencies to follow avoidance, mitigation, and preservation procedures, with public input, before proposing new construction in wetlands. It generally requires:

- Avoidance of wetlands,
- Minimization of activities in wetlands, and
- Coordination with the USACE and CWA Section 404 regarding wetlands mitigation.

State

Water Quality Statutes and Regulations

Section 303(d) of the CWA requires that the State Water Board identify surface water bodies within California that do not meet established water quality standards. Once identified, the affected water body is included in the State Water Board "303(d) Listing of Impaired Water Bodies" and a comprehensive program must then be developed to limit the amount of pollutant discharges into that water body. This program includes the establishment of Total Maximum Daily Loads (TMDL) for pollutant discharges into the designated water body. The most recent 303(d) listing for California was approved by the United States Environmental Protection Agency (EPA) in 2010.

The Porter-Cologne Water Quality Control Act of 1969 authorized the State Water Board to provide comprehensive protection for California's waters through water allocation and water quality protection. The State Water Board implements the requirement of the CWA Section 303, indicating that water quality standards have to be set for certain waters by adopting water quality control plans under the Porter-Cologne Act. The Porter-Cologne Act established the responsibilities and authorities of the nine RWQCBs, which include preparing water quality plans for areas in the region, identifying water quality objectives, and issuing NPDES permits and Waste Discharge Requirements (WDRs). Water quality objectives are defined as limits or levels of water quality constituents and characteristics established for reasonable protection of beneficial uses or prevention of nuisance. The Porter-Cologne Act was later amended to provide the authority delegated from the EPA to issue NPDES permits. The RWQCB with jurisdiction over the project site is the San Francisco Bay Region.

Post-construction stormwater controls to satisfy requirements of the NPDES Program are permitted under the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit (Order R2-2015-0049). Facilities must be designed to evapotranspire, infiltrate, harvest/use, and bio treat stormwater. As of July 1, 2016, hydromodification management procedures are required.

Projects disturbing more than 1 acre of land during construction are required to comply with the Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ, effective February 14, 2011; NPDES No. CAS000002). Construction General Permit activities are regulated at a local level by the RWQCB pursuant to a general permit. No site-specific authorization is needed. To obtain coverage under the Construction General Permit, a project applicant must provide a Notice of Intent (NOI), a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on project location and timing (such as wet season versus dry season activities). The

receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made when the NOI is filed (once more details of the timing of the construction activity are known).

The performance standard in the Construction General Permit is that dischargers minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and BMPs. A SWPPP must be prepared by a qualified SWPPP developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is (1) to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Examples of BMPs include silt fencing, street sweeping, and inspection. Operation of BMPs must be overseen by a qualified SWPPP practitioner who meets the requirements outlined in the permit.

Section 1600–1616 of the California Fish and Game Code requires that the California Department of Fish and Wildlife (CDFW) be notified of activity that will: substantially divert or obstruct the natural flow of any river, stream, or lake; or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared that outlines reasonable conditions necessary to protect natural resources threatened by the proposed activity.

Stormwater Guidance Publications

California Stormwater Quality Association (CASQA), a professional organization, has published guidance for stormwater management. The organization's Stormwater Best Management Handbook provides guidance for compliance with State stormwater regulations for construction. The Handbook provides detailed monitoring guidance and inspection forms, including a SWPPP Template. The Handbook addresses selection and implementation of BMPs to eliminate or to reduce the discharge of pollutants and control or reduce impacts to the hydrologic cycle associated with development and redevelopment activities.

The California Department of Transportation (Caltrans) also has published a Stormwater Quality Handbook Construction Site Best Management Practices Manual that provides similar guidance for transportation projects.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hydrology and water quality:

Goal 10 Protect the lives and property of American Canyon's residents and visitors from flood hazards.

Objective 10.1 Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.

Policies

Policy 10.1.1 Retain and enhance natural watercourses, including perennial and intermittent streams, as the City's primary flood control channels whenever feasible.

Policy 10.1.4 Ensure that stormwater drainage is designed for peak flow conditions.

Policy 10.1.5 Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer.

Policy 10.1.12 Require that proposed developments within the 100-year floodplain submit information regarding the flood hazard prepared by a qualified Civil Engineer or Hydrologist.

Policy 10.1.13 Require that proposed developments within the 100-year floodplain submit plans to adequately mitigate flood hazards and demonstrate that such improvements will not create or increase downstream or upstream flood hazards.

Stormwater Management

As required under State Water Board Order No. 2013-001 DWQ, the City of American Canyon maintains a Storm Water Management Plan (SWMP) (NPDES Permit No. CAS 612007). As one element of that Program, the City requires regulated projects to address post-construction stormwater quality. The City of American Canyon requires regulated projects, such as this one, to prepare a Stormwater Control Plan in accordance with the Bay Area Stormwater Management Agencies Association–Post Construction Manual. The Stormwater Control Plan must include post-construction stormwater treatment measures such as bioretention facilities and source control BMPs. The SWMP must also address ongoing maintenances of those facilities.

A Stormwater Control Plan and a Stormwater BMP Operations and Maintenance Plan will be required for the proposed project in accordance with the Bay Area Stormwater Management Agencies Association–Post Construction Manual. The proposed project would also incorporate LID design strategies including bioretention and inlet markings.

In addition, the City requires that a Preliminary Hydrology and Hydraulics Study be prepared to determine whether there are significant impacts. Storm drain design is required to conform to Section 4 of the City's Engineering Standard Plans and Specifications for Public Improvements. Those standards require, among other things, that post-development runoff be no greater than 90 percent of pre-development runoff.

3.8.4 - Methodology

Balance Hydrologics prepared a Preliminary Hydrologic and Hydraulic Modeling Memo that assessed and outlined how the changes in existing and proposed land cover, along with the proposed construction of Devlin Road, will impact the hydrology and hydraulics of the creek directly downstream of the project area and along the reach to its confluence with the Napa River. The memo is provided in Appendix F.

Additional information was provided by site reconnaissance, review of project plans, and review of resources including the City of American Canyon General Plan, the DWR Bulletin 118, the CWA 303(d) list, and the Western Regional Climate Center.

3.8.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to utilities and service systems are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

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:
   (i) result in substantial erosion or siltation on- or off-site;
   (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
   (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
   (iv) impede or redirect flood flows;

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Water Quality

Impact HYD-1:	**Construction activities and changes to drainage patterns associated with the proposed project may degrade surface water quality in downstream water bodies.**

Impact Analysis

Phases 1 and 2

This analysis assesses the potential for the proposed project to degrade surface water quality in downstream water bodies.

The potential for the proposed project to degrade water quality arises 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. Left unabated, increased loading of such pollutants could cause geomorphic change in downstream channel reaches, degrade habitat, and undermine TMDL and other water quality requirements.

Construction activities would disturb approximately 163 acres of the project site and include grading, building construction, paving, and utility installation. Construction would require the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals, such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances, could be used during construction. An accidental release of any of these substances could degrade the quality of the surface water runoff and adversely affect receiving waters. As such, Mitigation Measure (MM) HYD-1a is proposed, requiring the development and implementation of a SWPPP to outline site-specific stormwater quality control measures (such as Best Management Practices [BMPs]) during construction activities to prevent pollutants from entering downstream waterways. With implementation of MM HYD-1a, impacts would be reduced to a less than significant level.

Post-construction, typical urban contaminants associated with roadways, parking areas, and rooftops will be introduced to the project site. Moreover, the increase in impervious area increases the efficiency by which sediment and other pollutants are delivered downstream. Concentration of flow by the storm drain system could increase the erosive energy of flows, thereby increasing sediment supply from the project site. Runoff from landscaped areas may also contain residual pesticides and nutrients. Consequently, there is potential for long-term degradation of runoff water quality from the implementation of the project.

The project proposes the following post-construction stormwater management features, according to a three-tiered LID/BMP design approach:

- The purpose of site design BMPs is to maintain pre-development runoff characteristics, protect sensitive resource areas, and attempt to minimize new impervious areas. The site has been designed to limit the amount of disturbed area and new impervious areas.
- Source control BMPs use structural controls and operational procedures to limit pollutants at their source. The project would implement the following source control BMPs: mark "No Dumping! Flows to River" on storm drain inlets; plumb interior floor drains to sanitary sewer; carefully manage pesticide use for landscaped areas; post "Do Not Dump Hazardous Materials Here" on refuse areas; utilize enclosed trash compactors; grade loading docks to minimize run-on and contain spills; and drain parking areas to bioretention planters.
- Treatment control BMPs are designed to reduce the amount of pollutants in stormwater and to reduce runoff rates or volumes. All new impervious areas will be routed through either a bioretention basin or an infiltration planter. The floors of bioretention basins will be amended with a layer of gravel overlain by a layer of specialized biosoil. The biosoil will be a sandy loam material to promote infiltration while allowing for vegetation to establish. An underdrain will be installed to facilitate infiltration as the local soils have low infiltration potential. Bioretention basins have been configured to drain within 48 hours to prevent vector concerns.

Additionally, the wetland preserve would facilitate the natural sequestration of pollutants of stormwater leaving the project site.

MM HYD-1b is proposed requiring (1) that the Stormwater Control Plan be reviewed and verified by the City of American Canyon to ensure the proposed stormwater controls are adequate pursuant to the requirements Order No. R2-2015-0049 (or more recent permit), and (2) that an operation and maintenance program is in place to ensure the long-term functionality of the stormwater controls. The various RWQCBs have evaluated the effectiveness of the types of BMPs required by MM HYD-1b and have determined that BMPs are known to be effective in protecting receiving waters. Thus, there is a high degree of certainty that the proposed project would not exacerbate the existing water quality status of the Napa River. Impacts would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-1a Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a Storm Water 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 (e.g., runoff), 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 (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) (e.g., silt fencing,

street sweeping, routine inspection, etc.) 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 (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual. The SWPPP shall be implemented during construction.

MM HYD-1b Prior to the issuance of building permits, the project applicant shall submit a Stormwater Control Plan to the City of American Canyon for review and approval. The plan shall be developed using the California Stormwater Quality Association (CASQA) "New Development and Redevelopment Handbook" and include the applicable provisions of Section C.3 of the San Francisco Bay Regional Water Quality Control Board (RWQCB) Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008 (or more recent permit). The Stormwater Control Plan shall identify pollution prevention measures and Best Management Practices (BMPs) to control stormwater pollution from operational activities and facilities and provide maintenance in perpetuity. The Stormwater Control Plan shall include Low Impact Development (LID) design concepts, as well as concepts that accomplish a "first flush" objective that would remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City, identifying procedures to ensure stormwater quality control measures work properly during operations.

Level of Significance After Mitigation

Less than significant impact.

Groundwater

Impact HYD-2: The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge.

Impact Analysis

Phases 1 and 2

This analysis assesses the potential for the proposed project to deplete groundwater supplies or interfere substantially with groundwater recharge.

Groundwater Overdraft

The proposed project would be served with potable water service provided by the City of American Canyon; the proposed project would not rely groundwater wells as a water supply source. Therefore,

the proposed project would not exacerbate groundwater overdraft (to the extent that it exists) or conflict with the provisions of a sustainable groundwater management plan. Impacts would be less than significant.

Groundwater Recharge

The proposed project would result in an increase in additional pervious surfaces. However, the project site is at a relatively low elevation and is near the Napa River; thus, groundwater levels tend to be high and soils in the lowest portions of the site are often saturated. Accordingly, the groundwater water recharge potential of the project site would be limited. For these reasons, impacts to groundwater recharge would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Drainage

Impact HYD-3:	**The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.**

Impact Analysis

Phases 1 and 2

This impact assesses the potential for the proposed project to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or cause flooding on- or off-site.

The proposed project would result in the development of 2.4 million square feet of new industrial development and infrastructure on 163 acres of the project site. The remaining 45 acres would be preserved as open space. Thus, the proposed project would increase the amount of impervious surface coverage on the project site and would create the potential for increased runoff leaving the project site that may create potential flooding conditions in downstream waterways.

The proposed project would install a storm drainage system designed for a 15-year storm event. Inlets would capture surface runoff, where it would enter an underground piping system that would convey stormwater to one of four basins. The basins would provide 110,766 square feet (2.6 acres) of stormwater retention.

In accordance with applicable provisions of Section C.3 of the San Francisco Bay RWQCB Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008 (or more recent permit) as required under MM HYD-1b, the proposed project would implement LID stormwater management

methods into the on-site storm drainage system consisting of rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment.

Collectively, these measures would serve to slow, reduce, and meter the volume of runoff leaving the project site and ensure that downstream storm drainage facilities are not inundated with project-related stormwater. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

3.9 - Land Use

3.9.1 - Introduction

This section describes the existing land use and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on-site reconnaissance and review of the City of American Canyon General Plan, the American Canyon Municipal Code, and the Napa County Airport Land Use Compatibility Plan.

3.9.2 - Environmental Setting

Land Use

Project Site

The project site contains undeveloped land. There are no structures on-site. Vegetation consists primarily of non-native grasslands, with seasonal wetlands and associated plant species scattered throughout the site. The project site gently slopes from east to west and the elevation ranges from 50 feet to 35 feet above mean sea level. The headwaters of No Name Creek are located in the northwestern portion of the site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park Wetland Preserve. The drainage is hydrologically connected to Fagan Slough, which flows into the Napa River. The majority of wetlands that occur throughout the site are supported by direct precipitation. Small soil mounds are located in various places throughout the site.

The West Napa Fault bisects the project site in a northwest/southeast direction. An existing 18-inch diameter force main that connects the Tower Road Pump Station with the Green Island Pump Station crosses the western portion of the project site.

The City of American Canyon owns an approximately 8-acre strip of land that bisects the site north-to-south. This strip of land would support the planned extension of Devlin Road from Middleton Way to Green Island Road, which was under construction as of Summer 2021.

Photographs of the project site are provided in Exhibit 2-3.

Surrounding Area

West

The California Northern Railroad line, connecting American Canyon and Sonoma, and the Biagi Brothers distribution warehouse form the western boundary of the project site.

North

Devlin Road and the Napa Logistics Park form the northern boundary of the project site. Napa Logistics Park contains more than 2 million square feet of distribution warehouses as well as a planned Pacific Gas and Electric Company regional operations and maintenance center. Further north is the Napa County Airport.

East

The Napa Branch Line, a railroad that connects American Canyon and Napa, forms the eastern boundary of the project site. East of the branch line are several industrial and commercial business that front State Route 29 (SR-29).

South

Green Island Road, Crown Hill Stone Supply, and the Wine Direct warehouse form the southern boundary of the project site. Further south are industrial and commercial businesses within the Green Island Business Park.

Land Use Designations

Project Site

The project site is designated "Industrial" by the City of American Canyon General Plan and zoned "General Industrial." The project site is within the boundaries of the Napa County Airport Land Use Compatibility Plan.

Surrounding Land Uses

Table 3.9-1 summarizes the surrounding land uses. As shown in the table, all surrounding properties are designated for industrial use.

Table 3.9-1: Surrounding Land Use Designations

Land Use	Relationship to Project Site	Land Use Designation	
		General Plan	Zoning
Green Island Business Park	West and South	Industrial	General Industrial (GI)
Napa Logistics Park	North	Industrial	Napa County Airport Industrial Area (SP-2)
Diablo Timber	East	Industrial	Light Industrial (LI)
Undeveloped Land	East	Industrial	Light Industrial (LI)
Crown Hill Stone Supply and Wine Direct	South	Industrial	General Industrial (GI)
Source: City of American Canyon 2021.			

Napa County Airport

The Napa County Airport is located north of the project site, just beyond the Napa Logistics property. The County-owned airport occupies approximately 824 acres and contains three runways (ranging from 2,510 to 5,931 feet in length), associated taxiways and tarmacs, a control tower, approximately 200 hangars, approximately 160 tie down spaces, and a helicopter pad. The airport averages 148 operations per day and 54,020 operations annually. (The Federal Aviation Administration defines an "operation" as one takeoff or landing).

The project site is located within Napa County Airport Land Use Compatibility Zone D (Common Traffic Pattern). Zone D is defined as the area where structures are routinely over flown by aircraft at altitudes of 300 to 1,000 feet with frequent single-event noise intrusion.

3.9.3 - Regulatory Framework

State

State Aeronautics Act

The State Aeronautics Act requires each county with an airport to establish an Airport Land Use Commission (ALUC) to regulate land use around airports to protect public safety and ensure that land uses near airports do not interfere with aviation operations. The Napa County Airport Land Use Compatibility Plan regulates land use around the Napa County Airport, as well as two other aviation facilities in the County, by requiring compliance with the policies of the plan. In certain circumstances, local governments may override the decisions of the ALUC.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan provides a blueprint for future development within American Canyon and the Sphere of Influence. The American Canyon Council adopted its most recent General Plan on November 3, 1994. The General Plan contains the following chapters: land use, housing, economic development, circulation, utilities, public facilities and services, parks and recreation, natural historic/cultural resources, geology, flooding, and noise. Each chapter establishes goals and policies to guide future land use activities and development within the General Plan boundaries. Note that the Circulation Element was comprehensively updated in 2013, the Housing Element was comprehensively updated in 2015, and incremental amendments have been made to the Land Use Element over time and as recently as 2021.

Industrial

The City of American Canyon General Plan designates the project site as Industrial. The following land use activities are identified as permitted uses within the Industrial land use designation: light manufacturing (including auto manufacturing); aviation-related; agribusiness related; industrial sector "clusters;" thematic industries; business parks; warehouses; professional offices; supporting retail, restaurant, and financial; and similar uses. The General Plan establishes a floor area ratio (FAR) of 0.5 for labor-intensive industries and a FAR of 0.7 for low labor uses.

American Canyon Zoning Ordinance

American Canyon Municipal Code Title 19 contains the Zoning Ordinance. The project site is designated General Industrial (GI) by the Zoning Ordinance. The General Industrial zoning district is defined as follows: "To provide areas appropriate for functional industrial activities, including warehousing, manufacturing, food processing, product and equipment assembly, and similar types of uses that may involve both indoor and outdoor activities, and related ancillary uses." The Zoning Ordinance lists research and development, wholesaling, distribution, and storage as permitted uses within the General Industrial zoning district. New development within the General Industrial zoning

district is limited to 40 feet above finished grade and no more than 0.5 FAR for labor-intensive industries and no more than 0.7 FAR for low labor uses.

County of Napa

Napa County Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The Airport Land Use Compatibility Plan was adopted by the Napa County ALUC in April 1991 and revised in December 1999.

Noise

Table 2-1 of the Airport Land Use Compatibility Plan identifies acceptable aviation noise levels by land use. For warehouse and light industrial uses, aviation noise levels of up to 60 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) are listed as "clearly acceptable" and noise levels between 60 and 65 dBA CNEL are listed as "normally acceptable." Noise levels between 65 and 75 dBA CNEL are listed as "marginally acceptable."

Flight Hazards

The Airport Land Use Compatibility Plan identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The Airport Land Use Compatibility Plan establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Certain land use activities may pose hazards to aviation. Specific characteristics that should be avoided within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights.
- Sources of dust, steam, or smoke that may impair pilot visibility.
- Sources of electrical interference with aircraft communications or navigation.
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses.

Zone D

The Airport Land Use Compatibility Plan provides the following description of Zone D in Table 3-1:

> Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective "Airport Impact Areas" figures contained in Part III. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches) a moderate level of risk exists.

The Airport Land Use Compatibility Plan establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.
- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.
- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The Airport Land Use Compatibility Plan states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D.

3.9.4 - Methodology

FirstCarbon Solutions (FCS) evaluated the potential for land use impacts through site reconnaissance and review of applicable land use policy documents. FCS performed site reconnaissance on the project site and surrounding land uses in February 2021. Photographs were taken of the project site and surrounding land uses to document existing conditions. FCS reviewed the City of American Canyon General Plan, the American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan to identify applicable policies and provisions that pertain to the proposed project. The proposed project's plans were reviewed to evaluate consistency with General Plan and Zoning Ordinance's standards.

3.9.5 - Thresholds of Significance

Appendix G to the California Environmental Quality Act (CEQA) Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to land use are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

a) Physically divide an established community (refer to Section 7, Effects Found not to be Significant); or

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.

3.9.6 - Project Impacts Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

General Plan Consistency

Impact LU-1:	**The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.**

Impact Analysis

The proposed project would consist of the development of up to 2.4 million square feet of high-cube warehouse on 163 acres. The remaining 45 acres would be preserved as wetlands.

Phase 1

The applicant has developed site design-level plans for Phase 1, the 94.7-acre area east of the Devlin Road extension. This area will support two high-cube warehouse buildings totaling 1,069,904 square feet. One of the buildings would be rail-served by the adjacent Napa Branch Line. Each building would provide docks, grade-level roll-up doors, and trailer parking stalls. The facility would be enclosed with a secure perimeter and access would be restricted to authorized users.

The Phase 1 end uses would be consistent with the types of permitted uses set forth in the General Plan. Additionally, Phase 1 would have a 0.26 FAR and would be within the General Plan's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses. The proposed high-cube warehouses would have 36 feet clear height and, thus, be within the 40-foot height limit.

Phase 2

Phase 2, the 113.1-acre area west of Devlin Road, is conceptually proposed for the remaining 1.3 million square feet of high-cube warehouse.

The Phase 2 end uses would be consistent with the types of permitted uses set forth in the General Plan. Additionally, Phase 2 would have a 0.26 FAR and would be within the General Plan's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses.

Phases 1 and 2

Table 3.9-2 evaluates Phase 1 and Phase 2 consistency with the relevant goals, objectives, and policies of the City of American Canyon General Plan. The conclusions expressed in Table 3.9-2 reflect the best judgment of City staff. The ultimate question of the meaning of particular General Plan policies, and thus the proposed project's consistency with them, lies with the City Council. The language found in general plans is sometimes susceptible to varying interpretations. Case law interpreting the Planning and Zoning Law (Gov. Code, § 65000 *et seq*.) makes it clear that: (i) the ultimate meaning of such policies is to be determined by the elected city council or a lower tier decision-making body such as a planning commission, as opposed to city staff and EIR consultants,

applicants, or members of the public; and (ii) the decision-making body's interpretations of such policies will prevail if they are "reasonable," even though other reasonable interpretations are also possible (*See No Oil, Inc.* v. *City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249). Courts also have recognized that, because general plans often contain numerous policies adopted to effect differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association* v. *City of Oakland* (1993) 23 Cal.App.4th 704, 719). Furthermore, courts strive to "reconcile" or "harmonize" seemingly disparate general plan policies to the extent reasonably possible (*No Oil, supra,* 196 Cal.App.3d at p. 244).

As shown in the table, City staff concludes that the proposed project is consistent with all applicable goals, objectives, and policies. Impacts would be less than significant. Should City decision-makers choose to approve the proposed project, they may rely on the analysis in the table as support for the conclusion that the project is consistent with the General Plan. Certification of the Final EIR will be indicative of agreement with the conclusions in the table.

Table 3.9-2: General Plan Consistency Analysis

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
Land Use	Goal 1A	Provide for a diversity of land uses that a. serve the needs of existing and future residents; b. capitalize upon the tourism and agricultural heritage of the region; c. capitalize upon and preserves the unique environmental resources and character of the area; d. offer sustained employment opportunities for residents of the City and the surrounding region; e. sustain and enhance the long-term economic viability of the City; f. revitalize areas of physical and economic deterioration and/or obsolescence; g. are developed at densities/intensities that are economically viable and complementary with the natural environmental setting and existing development; and h. provide a greater balance of jobs and housing.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse on the approximately 208-acre project site. The project site is designated "Industrial" by the General Plan and the end uses are consistent with the allowable uses for this land use designation. The proposed project would create as many as 3,643 new jobs, stimulate capital investment, and expand the tax base. The proposed project would also include an existing Wetland Preserve in the western portion of the site. As such, the proposed project would be consistent with the provisions of this goal, including serving the needs of residents, protecting environmental resources, creating employment opportunities, and balancing jobs and housing.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Objective 1.1	Accommodate the development of a balance of land uses that (a) provide for the housing, commercial, employment, educational, cultural, entertainment, and recreation needs of residents, (b) capture visitor and tourist activity, (c) provide employment opportunities for residents of the greater sub region; and (d) provide open space and aesthetic relief from developed urban/suburban areas.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse that would create as many as 3,643 new jobs, primarily for residents of the region. The proposed project would also include an existing Wetland Preserve, consistent with the item that calls for open space and aesthetic relief from developed urban areas.
	Policy 1.1.4	Provide adequate transportation (vehicle, bicycle, and pedestrian) and utility (sewer, water, energy, etc.) infrastructure and public services (police, fire, schools, etc.) to support the needs of the residents and businesses of American Canyon.	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.11, Public Services, Section 3.12, Transportation, and Section 3.13, Utilities and Service Systems, for further discussion.
	Goal 1B	Provide for the orderly development of American Canyon that maintains its distinctive character.	**Consistent:** The proposed project would develop 2.4 million square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is located within the Green Island Business Park and is surrounded by urban uses and infrastructure on three sides. As such, it is well suited for new development and would advance the goal of orderly development that maintains American Canyon's distinctive character.
	Objective 1.2	Promote a rate of growth that is consistent with the ability of the City to provide adequate infrastructure and services and does not adversely impact the distinctive character and quality of life in American Canyon.	**Consistent:** The proposed project would develop 2.4 million square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is located within the Green Island Business Park and is surrounded

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			by urban uses and infrastructure on three sides. Thus, the proposed project would occur in an area where adequate infrastructure and services exist such that it would not exceed the City's ability to serve it.
	Policy 1.2.2	Establish as a priority the development of projects that are contiguous with and infill the existing pattern of development, avoiding leap-frog development, except for large scale master planned projects that are linked to and planned to be extensions of existing development and for which infrastructure and services are in place or funded.	**Consistent:** The project site is located within the Green Island Business Park and is surrounded by urban uses and infrastructure on three sides. As such, it would meet the criteria set forth in this policy for a "priority" project.
	Objective 1.3	Ensure that land use development is coordinated with the ability to provide adequate public infrastructure (transportation facilities, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (governmental administrative, capital improvements, police, fire, recreational, cultural, etc.).	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.11, Public Services, Section 3.12, Transportation, and Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 1.3.1	Implement public infrastructure and service improvements necessary to support land uses accommodated by the Land Use Plan (as defined in the Circulation and Public Utilities and Services Elements.)	**Consistent:** Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.11, Public Services, Section 3.12, Transportation, and Section 3.13, Utilities and Service Systems, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.3.2	Require that type, amount, and location of development be correlated with the provision of adequate supporting infrastructure and services (as defined in the Circulation and Public Utilities and Services Elements.)	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.11, Public Services, Section 3.12, Transportation, and Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 1.3.3	Regulate the type, location, and/or timing of development as necessary in the event that there is inadequate public infrastructure or services to support land use development.	**Consistent:** Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.11, Public Services, Section 3.12, Transportation, and Section 3.13, Utilities and Service Systems, for further discussion.
	Goal 1C	Create a pattern and character of land use development that establishes American Canyon as a distinct "place" differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. The proposed project includes an existing Wetland Preserve, which occupies the western portion of the site. As such, the proposed project would promote a development pattern that differentiates American Canyon from adjacent urban areas and also respects the natural environment.
	Objective 1.4	Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29,	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. The proposed project site includes an existing Wetland Preserve, which is located on the western portion of the site. Accordingly, the proposed project would advance the objectives associated with balancing uses to serve both sides of SR-29 and promoting a

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		and (d) establishes an overall compact urban form surrounded by open space.	compact urban form surrounded by open space.
	Policy 1.4.1	Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1).	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. This is consistent with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1 of the General Plan).
	Policy 1.4.2	Require that development within each land use classification adheres to applicable requirements and standards.	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. As discussed in Impacts LU-1 and LU-2, the proposed project would comply with all applicable requirements and standards.
	Objective 1.5	Maintain the character and quality of the natural environmental resources of the City and protect the population and development from the adverse impacts of environmental hazards.	**Consistent:** The proposed project site includes an existing Wetland Preserve, located on the western portion of the site. This area coincides with a 100-year flood plain and the highest quality habitat on the project site. Given that no development would occur in the Wetland Preserve, the proposed project would advance the policy of maintaining the quality of natural resources and protecting the public from adverse impacts of environmental hazards.
	Policy 1.5.1	Require that development be designed and sited to protect significant environmental resources by adherence to the policies, standards, and programs contained in the Natural and Historic/Cultural Resources, Geology and Flood Hazards, and Noise Elements of the General Plan, as well as federal (NEPA) and State (CEQA) regulations.	**Consistent:** The proposed project site includes an existing Wetland Preserve, located on the western portion of the site. This area coincides with a 100-year flood plain and the highest quality habitat on the project site. Given that no development would occur in the Wetland Preserve, the proposed project would advance the policy of protecting significant environmental resources.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Goal 1I	Ensure the development of industrial uses that provide employment for residents of American Canyon and the surrounding region and contribute significant revenue for the City.	**Consistent:** The proposed project would develop 2.4 million square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The proposed project is estimated to create as many as 3,643 new jobs for local residents. As such, it would advance the goal of providing employment opportunities and contributing significant revenue for the City.
	Objective 1.22	Provide for the continuation of existing and development of new industries that capitalize upon the geographic advantages of the City (including adjacency to Napa County Airport and the railroad), the agricultural production of the region, and emerging types of businesses (such as "thematic" and "environmental" based industries), offer opportunities for the clustering of key economic sectors, and maintain the environmental quality of the City.	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. The proposed project would develop 2.4 million square feet of high-cube warehouse uses. At least one of the proposed buildings would be "rail-served." This is consistent with the objective of promoting the development of existing and new industries that capitalize on the geographic advantages of the City.
	Policy 1.22.1	Accommodate the continuation of existing and development of new manufacturing, research and development, warehouse and distribution, ancillary offices, and similar uses in areas designated as "Industrial (I)" on the Land Use Plan Map (Figure 1-1).	**Consistent:** The project site is located within the Green Island Business Park and is designated for industrial development. The proposed project would develop 2.4 million square feet of high-cube warehouse uses. This is consistent with the policy of promoting the development of existing and new warehouse and distribution and ancillary offices in areas designated as "Industrial (I)" on the Land Use Plan Map (Figure 1-1 of the General Plan).
	Policy 1.22.2	Allow for the inclusion of businesses that are ancillary to and support industrial uses such as related retail sales facilities for manufacturers, financial institutions, restaurants, photocopy shops, specialty recreational uses (batting cages and health clubs/spas), and similar uses.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse uses. Ancillary office space would be provided within the warehouses. The provision of these ancillary uses is consistent with the intent of this policy.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.22.3	Permit development according to the following standards: a. Labor-intensive uses: a maximum floor area ratio of 0.5. b. Low labor uses (such as warehousing): a maximum floor area ratio of 0.7.	**Consistent:** Phase 1 and Phase 2 would both have a 0.26 FAR, which would be within the General Plan's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses.
	Policy 1.22.4	Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following: a. architectural treatment of all building elevations; b. use of extensive landscape along the primary street frontages and parking lots; and c. enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.	**Consistent:** The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Devlin Road frontage. Outdoor storage areas would be enclosed where necessary to screen them from view from major roadways. The City's design review process would ensure consistency with the applicable policies.
	Policy 1.22.5	Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following: a. inclusion of pedestrian walkways, arcades, an/or other visual elements to interconnect individual buildings; b. differentiation of building facades by materials, color, architectural details and modulation of building volumes; c. incorporation of extensive landscape in parking areas, along building frontages, and other public areas; d. use of consistent and well-designed public and informational signage; and e. installation of elements that define the key entries to the industrial district.	**Consistent:** The proposed project would provide internal pedestrian facilities, contemporary finishes and treatments similar to other industrial buildings in the project vicinity, landscaping within parking areas and along the Devlin Road frontage, and signage consistent with this policy. The City's design review process would ensure consistency with the applicable policies.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.22.7	Require that truck access be controlled so that it is safe and efficient and minimizes exposure to adjacent residential neighborhoods.	**Consistent:** Trucks would access the project site from Green Island Road or Devlin Road. Both roads avoid residential areas. The project site's location also allows for convenient access to SR-12 (east and west) such that residential areas in American Canyon would be avoided by trucks using this highway.
	Goal 1N	Ensure the compatibility of development within American Canyon with the Napa County Airport.	**Consistent:** As discussed in Impact LU-3, the proposed project, with Mitigation Measure (MM) LU-3, is compatible with all applicable provisions of the Napa County Airport Land Use Compatibility Plan.
	Objective 1.27	Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.	**Consistent:** As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of the Napa County Airport Land Use Compatibility Plan including those that pertain to noise and safety.
	Policy 1.27.1	Require that development comply with the land use and development conditions stipulated in Tables 1-1 and 1-2 for areas depicted on Figure 1-3. […] ZONE D Common Traffic Pattern: This area is defined by the flight pattern for the Napa County Airport as illustrated on Figure 1-3. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches) a moderate level of risk exists.	**Consistent:** The project site is located within Zone D of the Napa County Airport Land Use Compatibility Plan. As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D as set forth in Tables 1-1 and 1-2.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.27.2	Review all applications for new development, expansion of existing uses, and reuse within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions.	**Consistent:** As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D of the Napa County Airport Land Use Compatibility Plan.
	Goal 1R	Ensure a high quality of the City's built environment, architecture, landscape, and public open spaces.	**Consistent:** The proposed project consists of a contemporary 2.4-million-square-foot industrial development that includes a Wetland Preserve. This would advance the goal of providing a high-quality built environment and open space.
	Objective 1.32	Attain residential, commercial, industrial, and public buildings and sites which convey a high-quality visual image and character.	**Consistent:** The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Devlin Road frontage. Outdoor storage areas would be enclosed where necessary to screen them from view from major roadways. Overall, these characteristics would advance the objective of attaining high-quality visual character. The City's design review process would ensure consistency with the applicable policies.
	Policy 1.32.1	Require adherence to the Design and Development Principles prescribed in this Plan and the City's Design Review Guidelines which shall be updated periodically.	**Consistent:** The proposed project would incorporate relevant design concepts set forth in the latest adopted edition of the Design Review Guidelines. Moreover, the City's design review process would ensure consistency with the applicable policies.
	Policy 1.32.2	Require that development projects subject to discretionary review submit and implement a landscaping plan.	**Consistent:** The proposed project is subject to discretionary review and, therefore, the applicant has prepared and submitted a preliminary landscaping plan to the City, which will be considered as part of the approval process. A final landscaping plan will be

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			required as part of the City's design review process, which would ensure consistency with the applicable policies.
	Policy 1.32.5	Require the use of drought tolerant species in landscape design in accordance with the provisions of the Water Conservation and Landscape Act.	**Consistent:** The proposed landscaping plan incorporates drought tolerant species in accordance with the provisions of the Water Conservation and Landscape Act.
	Policy 1.32.6	Require that commercial, industrial, and multi-family residential development incorporate adequate drought-conscious irrigation systems and maintain the health of the landscape.	**Consistent:** The proposed landscaping plan incorporates adequate drought-conscious irrigation systems in accordance with the provisions of the Water Conservation and Landscape Act.
	Policy 1.32.7	Require that all commercial, industrial, multi-family, and common area landscape be adequately irrigated with automatic irrigation systems.	**Consistent:** The proposed landscaping plan incorporates automatic irrigation systems.
	Policy 1.32.8	Promote the use of reclaimed water for the irrigation of public and private landscape, as available.	**Consistent:** The proposed project would be served with reclaimed water provided by the City of American Canyon for landscape irrigation purposes.
	Objective 1.33	Ensure that structures and sites are designed and constructed to maintain their long-term quality and provide for the needs of their occupants.	**Consistent:** All proposed structures would be designed to suit the needs of the end user, consistent with this objective. The City's design review process would ensure consistency with the applicable policies.
	Policy 1.33.1	Require that all structures be constructed in accordance with the requirements of the City's building and other pertinent codes and regulations; including new, adaptively reused, and renovated buildings.	**Consistent:** All proposed structures would be required to adhere to the latest adopted edition of the California Building Standards Code at the time building permits are sought.
	Policy 1.33.3	Require that all development be designed to provide adequate space for access, parking, supporting functions, open space, and other pertinent elements.	**Consistent:** Phase 1 would provide 860 off-street parking spaces. Additionally, the proposed project site includes an existing Wetland Preserve.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.33.4	Require that all commercial, industrial, and public development incorporate appropriate design elements to facilitate access for and use by the physically challenged.	**Consistent:** All proposed structures would be required to incorporate all applicable disability access requirements set forth by the Americans with Disability Act (ADA).
Economic Development Element	Goal 3	Provide for the economic needs of American Canyon residents by capitalizing on the marketability of the City's industrial land and promoting a mix of uses which create quality jobs and foster fiscal stability.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse on an approximately 208-acre site in the Napa Airport Industrial Area. The proposed project would create as many as 3,643 new jobs, stimulate capital investment, and expand the tax base. These characteristics are consistent with the goal of providing for the economic needs of American Canyon residents.
	Objective 3.1	Maximize the City's market potential in terms of industrial/ business park and community-serving commercial activity. Increased industrial activity can be a catalyst for broadening the City's economic base by providing quality jobs and tax revenues, as well as, stimulating infrastructure improvements.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse on an approximately 208-acre site in the Green Island Business Park. The proposed project would create as many as 3,643 new jobs, stimulate capital investment, and expand the tax base. These characteristics are consistent with the objective of maximizing the City's market potential in terms of industrial/ business park activity.
	Policy 3.1.1	Adopt a Land Use Map which designates acreage for heavy industrial, light industrial/ business park, commercial, and recreational commercial activities.	**Consistent:** The approximately 208-acre project site is currently designated "Industrial" by the City of American Canyon General Plan and the proposed project's uses are consistent with the allowable uses of this land use designation.
	Policy 3.1.3	Seek to expand the City's economic base and development opportunities through planned annexation program that is linked to the General Plan and Land Use Plan.	**Consistent:** The project site was previously annexed into the City of American Canyon in 2005 and the proposed project contemplates the development of 2.4 million square feet of industrial uses on the site.
	Goal 3A	Generate new industrial growth through diversification of the	**Consistent:** The proposed project would develop 2.4 million square

Element	Goal/Objective/Policy No.	Goal/Objective/Policy Text	Consistency Determination
		industrial base and maintenance of current activity to provide employment opportunities for residents and generate fiscal revenues for the City.	feet of high-cube warehouse on an approximately 208-acre site in the Green Island Business Park. This is consistent with the goal of generating new industrial growth through diversification of the industrial base.
	Objective 3.4	Increase the number of firms within the industries now represented in the City and capture new, clean, nonpolluting industries that are stable and compatible with City needs in terms of traffic, air quality, and employment.	**Consistent:** The proposed project would develop 2.4 million square feet of high-cube warehouse on an approximately 208-acre site in the Green Island Business Park. These types of uses currently exist within the Airport Industrial Area. Additionally, the proposed project is estimated to create 3,643 new jobs. The proposed project would implement traffic improvements to mitigate for impacts on traffic operations.
	Policy 3.4.2	Establish design and FAR standards for industrial buildings which will create and maintain an attractive image for American Canyon's industrial areas without imposing overly restrictive regulations.	**Consistent:** As previously discussed, Phase 1 and Phase 2 would each have a FAR of 0.26 that would be within the allowable FARs of both 0.5 and 0.7, depending on the end user and use.
	Policy 3.4.3	In partnership with landowners and tenants, improve the infrastructure (particularly access across the North Slough drainage channel and the railroad) in the Green Island Industrial Park and Annexes and expand infrastructure services to the undeveloped sites on the north side of Green Island Road to link the two industrial areas and provide land use and design continuity to both sides of Green Island Road.	**Consistent:** The proposed project would take vehicular access from Devlin Road and Green Island Road. The City is in the process of extending Devlin Road from Green Island Road and Middleton Way and this extension will be completed by the time Phase 1 is completed. In addition, the City has planned improvements to Green Island Road that would also be in place by Phase 1.
	Objective 3.5	Make available sufficient acreage in order to capture the City's fair share of regional industrial growth through the year 2010.	**Consistent:** The project site is designated "Industrial" by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the objective of facilitating industrial development within American Canyon.

Element	Goal/Objective/Policy		Consistency Determination
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	Policy 3.5.1	Designate a sufficient amount of land to accommodate the projected growth in demand for industrial space by 2010.	**Consistent:** The project site is designated "Industrial" by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the policy of accommodating new industrial development within American Canyon.
Circulation Element	Guiding Policy 1.1	Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community's primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element: - Encourage and foster a strong sense of community and safety, as well as the "hometown" feeling by creation of a town center through land use and circulation planning. - Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic LOS and provide a Citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile. - Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement.	**Consistent:** Vehicular access to the project site would be provided from Green Island Road or the Devlin Road extension, which provides a connection to SR-29 via South Kelly Road. The project site's location also allows for convenient access to SR-12 (east and west) such that safe and convenient access can be provided for trucks and residential areas would be avoided. Additionally, this Draft EIR evaluates project impacts on the roadway system using the City's adopted Level of Service (LOS) standards. Refer to Section 3.12, Transportation for further discussion.
	Guiding Policy 1.2	Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complimentary intersection improvements to support General Plan buildout conditions. Planned	**Consistent:** This Draft EIR evaluates project impacts on the roadway system using the City's adopted LOS standards. Refer to Section 3.12, Transportation, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
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		improvements may be phased as development occurs and need for increased capacity is identified.	
	Guiding Policy 1.3	Design circulation system to focus regional travel on SR-29. SR-29 is important for both Citywide and north–south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a complete streets approach that will expand the travel capacity of SR-29.	**Consistent:** Vehicular access to the project site would be provided from Green Island Road or the Devlin Road extension, which was completed in 2012 and provides a connection to SR-29 via South Kelly Road. The project site's location also allows for convenient access to SR-12 (east and west) such that project-related traffic would not need to use side streets. Refer to Section 3.12, Transportation, for further discussion.
	Guiding Policy 1.6	Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak hours where possible and as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or density planned for in the Land Use Element of the General Plan. The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy: - State Route 29 through the City - American Canyon Road from SR 29 to Flosden Road – Newell Drive - Flosden Road south of American Canyon Road.	**Consistent:** This Draft EIR evaluates project impacts on the roadway system using the City's adopted LOS standards. Refer to Section 3.12, Transportation, for further discussion.
	Guiding Policy 1.9	Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.	**Consistent:** In addition to the Devlin Road extension, the proposed project would rely on existing roadways (e.g., Green Island Road, Devlin Road, and South Kelly Road) for vehicular access.

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	Guiding Policy 1.11	Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.	**Consistent:** The project site is located within the Napa County Airport Industrial Area, which has convenient access to SR-12 and SR-29. The development of the proposed project's 2.4 million square feet of high-cube warehouse is within the North Bay Region and would contribute to reducing trip length by locating these facilities closer to customers within this region. Finally, the development of up to 3,643 new jobs in a housing-rich part of the Bay Area region would allow employees to work closer to where they live, thereby reducing vehicle miles traveled.
	Guiding Policy 1.12	Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.	**Consistent:** This Draft EIR evaluates project impacts on the roadway system using the City's adopted LOS standards. This is consistent with the policy of maintaining and improving mobility through circulation system enhancements. Refer to Section 3.12, Transportation, for further discussion.
	Implementing Policy 1.13	Financing Program. Develop a transportation financing program that will fully fund the planned expansion of the existing transportation network consistent with the General Plan. The financing program will include an update to the existing Transportation Impact Fee (TIF) program consistent with AB 1600.	**Consistent:** The proposed project would pay fees in accordance with the City's latest adopted traffic impact fee schedule, albeit with credits for improvements installed by the proposed project. This is consistent with the policy of implementing a transportation financing program that will fully fund the planned expansion of the existing transportation network.
	Implementing Policy 1.14	Work with Caltrans on highway improvements. Continue to work	**Consistent:** This Draft EIR evaluates project impacts on

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		with the Caltrans to achieve timely context sensitive design solutions, funding and construction of programmed highway improvements.	transportation facilities under the jurisdiction of California Department of Transportation (Caltrans) (i.e., SR-29). This is consistent with the policy of working with Caltrans on highway improvements. Refer to Section 3.12, Transportation, for further discussion.
	Implementing Policy 1.16	Use of Congestion Management Process. Utilize the NCTPA Congestion Management Program (CMP) to determine the timing and degree of regional roadway facility improvements in accordance with region wide plans. Actively participate in the Community-Based SR 29 Gateway Corridor Improvement Plan process to identify a funded SR 29 travel capacity enhancement through the City.	**Consistent:** This Draft EIR evaluates project impacts on CMP transportation facilities (SR-29). Refer to Section 3.12, Transportation, for further discussion.
	Implementing Policy 1.17	Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/ unincorporated communities as well as pass-through traffic.	**Consistent:** The proposed project would pay fees in accordance with the City's latest adopted traffic impact fee schedule, albeit with credits for improvements installed by the proposed project. This includes improvements under the jurisdiction of Caltrans, Napa County Transportation and Planning Agency (NCTPA), and the County of Napa. Refer to Section 3.12, Transportation, for further discussion.

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	Implementing Policy 1.19	Complete Streets. When constructing or modifying transportation facilities, consistent with Resolution 2012-72, "Complete Streets Policy of the City of American Canyon,", strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.	**Consistent:** All improvements required as mitigation for the proposed project would comply with the applicable provisions of Resolution 2012-72, "Complete Streets Policy of the City of American Canyon."
	Implementing Policy 1.23	Access Restriction. Minimize, where possible, the number of access points along arterial roadways, including by consolidating or relocating driveways to provide for more efficient traffic movement.	**Consistent:** Phase 1 would have four access points on both Devlin and Green Island Road. Half of these points would be designated for trucks and the other half would be designated for passenger vehicles. This is consistent with the policy of providing for more efficient traffic movement.
	Implementing Policy 1.24	Impacts of new development. Based upon the findings of a traffic impact study, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation related impacts.	**Consistent:** A traffic impact study was prepared as part of this Draft EIR. Refer to Section 3.12, Transportation, for further discussion.
	Implementing Policy 1.26	Update and adopt Transportation Impact Analysis (TIA) guidelines. Update and adopt Transportation Impact Analysis guidelines and a Multimodal LOS assessment methodology for the evaluation of potential transportation impacts resulting from new development that is specific to the City and that will supersede existing LOS standards and guidelines.	**Consistent:** A traffic impact study was prepared as part of this Draft EIR in accordance with the City of American Canyon's latest guidance for such studies. Refer to Section 3.12, Transportation, for further discussion.

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	No.	Text	
	Implementing Policy 1.35	General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.	**Consistent:** The applicant would develop the segment of the Class I Napa Valley Vine Trail along the project frontages with Devlin Road and Green Island Road. The proposed project's internal pedestrian facilities would connect to the Vine Trail. Additionally, there would be safe and convenient locations within the project site to allow for future transit service.
	Guiding Policy 2.1	Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.	**Consistent:** The applicant would develop the segment of the Class I Napa Valley Vine Trail along the project frontages with Devlin Road and Green Island Road. The proposed project's internal pedestrian facilities would connect to the Napa Valley Vine Trail. Additionally, the proposed project would be accessible to bicycles. Collectively, these characteristics would promote walking and bicycling.
	Guiding Policy 2.3	Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.	**Consistent:** The applicant would develop the segment of the Class I Napa Valley Vine Trail along the project frontages with Devlin Road and Green Island Road. The proposed project's internal pedestrian facilities would connect to the Napa Valley Vine Trail. Additionally, the proposed project would be accessible to bicycles. Collectively, these characteristics would promote a safe and efficient non-motorized circulation system.
	Implementing Policy 2.7	Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.	**Consistent:** The applicant would develop the segment of the Class I Napa Valley Vine Trail along the project frontages with Devlin Road and Green Island Road. These new trail segments would comply with the ADA. The proposed project's internal pedestrian facilities would also comply with the ADA.

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	Implementing Policy 2.18	Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade-separated crossings over State Route 29.	**Consistent:** The proposed project's internal pedestrian facilities would connect to the Napa Valley Vine Trail and, thus, advance the policy of providing pedestrian connections to employment destinations. The City's design review process would ensure consistency with this policy.
	Guiding Policy 4.1	Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.	**Consistent:** The project site is located within the Green Island Business Park, which has convenient access to SR-12 and SR-29. Additionally, at least one project building may be rail-served. This is consistent with the policy of promoting safe and efficient goods movement.
	Guiding Policy 4.2	Promote railroad safety. Minimize the safety problems associated with the railroad, including the construction and maintenance of at-grade crossings and the physical barrier effect of the track alignment on the City.	**Consistent:** Devlin Road provides a grade-separated overcrossing of the Napa Branch Line. Thus, vehicles traveling to and from the project site on Devlin Road would avoid any related safety problems. Additionally, both railroad grade crossings on Green Island Road would receive safety improvements as part of the City-led Green Island Road Widening Project.
	Guiding Policy 4.4	New truck route designation. All highways, arterials, and industrial streets shall be designated truck routes.	**Consistent:** Devlin Road, which was completed in 2012, is a designated truck route. The Devlin Road extension would also be a truck route. Additionally, Green Island Road is a designated truck route and would be improved along the project frontage as part of the City-led Green Island Road Widening Project.
	Guiding Policy 4.6	Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.	**Consistent:** The project site is located within the Green Island Business Park, which is designated for industrial development. There are no residential areas near this area, nor would project-related

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			truck routes travel through such areas.
	Guiding Policy 4.7	Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.	**Consistent:** Phase 1 would provide 806 off-street parking spaces, most of which would be suitable for tractor-trailer rigs. The project site would be secured with fencing and lighting. As such, the proposed project would provide secure truck parking.
Utilities	Goal 5	It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the general plan.	**Consistent:** This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Objective 5.2	Obtain additional water supply sources as necessary to supplement the [North Bay Aqueduct] supply and serve anticipated growth under the proposed land use plan.	**Consistent:** A Water Supply Assessment (WSA) was prepared for the proposed project and concludes that adequate supplies are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 5.2.4	Promote water conservation and wastewater reclamation as additional water supply sources.	**Consistent:** The proposed project would employ drought tolerant landscaping and be served with recycled water for non-potable irrigation purposes. This is consistent with the policy of promoting water conservation and wastewater reclamation. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 5.2.5	In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.	**Consistent:** A WSA was prepared for the proposed project and concludes that adequate supplies are available to serve the project. In addition, the proposed project would comply with the City's Zero Water Footprint Policy, which requires new development projects to secure offsets to ensure that existing customers do

Element	Goal/Objective/Policy		Consistency Determination
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			not experience a loss in reliability or an increase in rates.
	Objective 5.4	Establish a water management program to promote water conservation and wastewater reuse.	**Consistent:** The proposed project would employ drought tolerant landscaping and be served with recycled water for non-potable irrigation purposes. This is consistent with the objective of promoting water conservation and wastewater reuse. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 5.4.1	Promote the use of water-saving plumbing fixtures and water-saving landscaping.	**Consistent:** The proposed project would employ drought tolerant landscaping. The proposed project's plumbing fixtures would comply with the water conservation standards set forth in the latest adopted edition of the California Plumbing Code.
	Goal 5B	It shall be the goal of American Canyon to develop and maintain a water treatment and distribution system that meets generally accepted operational criteria for service to provide daily and peak demands, including fire flow requirements, to meet present and future needs in a timely and cost effective manner.	**Consistent:** This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Objective 5.7	Expand water treatment, storage and distribution facilities as necessary to meet increasing water demands.	**Consistent:** The existing water distribution lines in Green Island Road have adequate capacity to serve the project. Additionally, a WSA was prepared for the proposed project and concludes that adequate supplies are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 5.7.3	Require adequate water supply, distribution, storage, and treatment facilities to be operational prior to the issuance of certificates of occupancy.	**Consistent:** The existing water distribution lines in Green Island Road have adequate capacity to serve the project. Additionally, a WSA was prepared for the proposed project and concludes that adequate supplies are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Policy 5.7.4	Require all new development to be served from an approved domestic water supply.	**Consistent:** The proposed project would be served with potable water provided by the City of American Canyon, which is an approved domestic water supply.
	Policy 5.7.5	Monitor the demands on the water system and, as necessary, manage development to mitigate impacts and/or facilitate improvements.	**Consistent:** This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Objective 5.8	Ensure that the costs of improvements to the water supply, distribution, storage, and treatment system are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.8.1	Require improvements to the existing water supply, distribution, storage, and treatment facilities necessitated by a new development proposal be borne by the project proponent (in proportion to benefit); either through the payment of fees, or by the actual construction of the improvements.	**Consistent:** The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.

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	Goal 5C	Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.	**Consistent:** The proposed project would install an on-site stormwater drainage system that would include a network of detention basins. The system would be designed to accommodate peak storm event runoff in accordance with the City's latest adopted standards. This is consistent with the goal of providing adequate storm drain and flood control facilities to support permitted land uses and preserve the public safety. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.
	Objective 5.10	Ensure that adequate storm drain and flood control facilities are provided and properly maintained to protect life and property from flood hazards.	**Consistent:** The proposed project would install an on-site stormwater drainage system that would be designed to accommodate peak storm event runoff in accordance with the City's latest adopted standards. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.
	Policy 5.10.1	Provide for the maintenance of existing public storm drains and flood control facilities and for the construction of upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.	**Consistent:** The project applicant would install on-site storm drainage infrastructure and be responsible for its maintenance and upkeep.
	Policy 5.10.3	Require that adequate storm drain and flood control facilities be constructed coincident with new development.	**Consistent:** The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy.
	Policy 5.10.4	Limit new development, when necessary, until adequate flood control facilities are constructed to protect existing development and accommodate the new development runoff, or until mitigation is provided.	**Consistent:** The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy. This is consistent with the policy of requiring adequate flood control facilities to

Element	Goal/Objective/Policy No.	Goal/Objective/Policy Text	Consistency Determination
			be constructed in conjunction with new development.
	Objective 5.11	Ensure that the costs of improvements to the storm drain and flood control system are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.1	Require improvements to existing storm drain and flood control facilities necessitated by a new development proposal be borne by the project proponent; either through the payment of fees, or by the actual construction of the improvements in accordance with State Nexus Legislation.	**Consistent:** The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.3	Collect adequate amounts of fees and charges to fund the operation/maintenance of existing facilities and to construct new facilities.	**Consistent:** The project applicant would provide all required storm drainage fees to the City of American Canyon.
	Goal 5D	Maintain the quality of surface and subsurface water resources within the City of American Canyon and its Planning Area.	**Consistent:** As required by applicable laws and regulations, the proposed project would implement stormwater quality measures and practices to maintain the quality of surface and subsurface water resources.
	Objective 5.12	Enhance runoff water quality upstream of points of discharge to channelized drainage courses.	**Consistent:** As required by applicable laws and regulations, the proposed project would implement stormwater quality measures and practices that would enhance runoff water quality prior to discharge in downstream waterways.
	Policy 5.12.1	Capitalize on opportunities to reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/ sedimentation areas in suitable open space areas, and incorporated into landscaping adjacent to parking lots and streets.	**Consistent:** Passive treatment systems would be incorporated into the proposed project's storm drainage system where appropriate.

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	Policy 5.12.2	Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.	**Consistent:** The proposed project's storm drainage system would include a network of detention basins, which would serve to enhance the water quality of discharges from the facility through percolation of pollutants into the soil. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.
	Policy 5.12.3	Minimize impervious area that is directly connected to piped or channelized drainage systems in new development.	**Consistent:** Approximately 44.8 acres of the project site (22 percent) would be dedicated for Wetland Preserve and detention basin use. This would be consistent with the policy of minimizing impervious area that is directly connected to piped or channelized drainage systems in new development. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.
	Objective 5.13	Prevent degradation of surface water quality due to construction activities and industrial operations.	**Consistent**: As required by applicable laws and regulations, the proposed project would implement construction and operation stormwater pollution prevention measures to prevent degradation of surface water quality. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.
	Policy 5.13.1	Require that development activities comply with the State General Storm Water Permit For Construction Activities with measures that protect surface water quality to the maximum extent practicable.	**Consistent:** The proposed project's construction and operation stormwater pollution prevention measures would comply with the applicable stormwater permits. Refer to Section 3.8, Hydrology and Water Quality, for further discussion.

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	Goal 5E	It shall be the goal of the City of American Canyon to establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City's service area.	**Consistent:** This Draft EIR evaluates project impacts on wastewater collection and treatment and concludes that adequate capacity is available to serve the project. Refer to Section 3.13, Utilities and Service Systems, for further discussion.
	Objective 5.14	Provide a system of wastewater collection and treatment facilities which will adequately convey and treat wastewater generated by existing and future development in the City's service area.	**Consistent:** Aside from laterals to serve proposed buildings, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy.
	Policy 5.14.2	Provide for the construction of upgraded and expanded wastewater collection and treatment improvements to support existing and new development.	**Consistent:** The proposed project would connect to an existing sewer line located within Green Island Road. Aside from laterals to serve proposed buildings, no other wastewater upgrades would be required.
	Policy 5.14.4	Require new development to connect to a master planned sanitary sewer system. Where construction of master planned facilities is not feasible, and where the future construction of master planned faculties will not be jeopardized, the City Council may permit the construction of interim faculties sufficient to serve the present and short-term future needs.	**Consistent:** The proposed project would be served with sanitary sewer service provided by the City of American Canyon. The proposed project would connect to an existing sewer line located within Green Island Road; no interim facilities would be necessary.
	Policy 5.14.5	Require all new development to secure sewer capacity rights prior to or at the time building permits are issued.	**Consistent:** The City of American Canyon has indicated that the proposed project would be served with adequate sewer capacity.
	Objective 5.15	Ensure that wastewater collection and treatment facilities are upgraded and installed in a timely manner to meet usage requirements and maximize cost efficiency.	**Consistent:** Aside from laterals to serve proposed buildings, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in

Element	Goal/Objective/Policy		Consistency Determination
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			place prior to the issuance of a certificate of occupancy.
	Policy 5.15.1	Require that wastewater collection and treatment facilities be installed and available for use prior to the issuance of a certificate of occupancy.	**Consistent:** Aside from laterals to serve proposed buildings, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy.
	Objective 5.16	Ensure that the costs of infrastructure improvements are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements necessary to serve the proposed project and would be subject to City fee programs.
	Policy 5.16.1	Require that the cost for improvements to the existing wastewater collection and treatment facilities necessitated by a new development proposal be borne by the project proponent in proportion to benefit; either through the payment of fees, or by the actual construction of the improvements.	**Consistent:** The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements necessary to serve the proposed project and would be subject to City fee programs.
Public Services and Facilities	Goal 6A	Maintain a high level of fire protection and emergency services to City/District businesses and residences.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.11, Public Services, for further discussion.
	Objective 6.3	Ensure that the Fire District's facility, manpower and equipment needs keep pace with the City's growth.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.11, Public Services, for further discussion.
	Policy 6.3.1	Require that City planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded	**Consistent:** The American Canyon Fire Protection District was consulted during the preparation of this Draft EIR to determine

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		commensurably to serve the needs of the City's growing population and development base.	whether the proposed project would impede its ability to provide fire protection. Refer to Section 3.11, Public Services, for further discussion.
	Policy 6.4.3	Require, through the development review process, that all structures and facilities subject to the District's jurisdiction adhere to City, State and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.	**Consistent:** All proposed project structures would be required to comply with the latest adopted edition of the California Fire Code.
	Goal 6B	Ensure a high level of police protection for the City's residents, businesses and visitors.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Police Department and concludes that adequate levels of service can be provided. Refer to Section 3.11, Public Services, for further discussion.
	Objective 6.7	Coordinate development activities with the Napa County Sheriff's Department or other contract agency to ensure that adequate facilities and services are maintained for the City's residents, businesses and visitors.	**Consistent:** The American Canyon Police Department was consulted during the preparation of this Draft EIR to determine whether the proposed project would impede its ability to provide police protection. Refer to Section 3.11, Public Services, for further discussion.
	Policy 6.7.1	Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.	**Consistent:** The American Canyon Police Department was consulted during the preparation of this Draft EIR to determine whether the proposed project would impede its ability to provide police protection. Refer to Section 3.11, Public Services, for further discussion.
	Objective 6.9	Increase the residents' and Sheriff's Department ability to minimize crime and improve security for all uses of public and private buildings, sites, and open spaces.	**Consistent:** The proposed project incorporates design features such as low-profile landscaping and exterior lighting to prevent and deter criminal activity.
	Policy 6.9.2	Require that landscaping in proximity to commercial, industrial, multi-family, and public structures be sited to allow for security surveillance.	**Consistent:** The proposed project would provide low-profile, non-obtrusive landscaping along roadway frontages and within

Element	Goal/Objective/Policy		Consistency Determination
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			parking areas to allow for adequate security surveillance.
	Policy 6.9.3	Require the incorporation of lighting which provides adequate exterior illumination to facilitate security surveillance around commercial, industrial, multi-family, and public structures.	**Consistent:** The proposed project would provide exterior lighting that would provide adequate illumination.
Natural and Historic/ Cultural Resources	Goal 8	Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.	**Consistent:** This Draft EIR evaluates the proposed project's potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.1	Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.	**Consistent:** This Draft EIR's evaluation of potential impacts on biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the objective of using best available information to facilitate resource conservation. Refer to Section 3.3, Biological Resources, for further discussion.
	Policy 8.1.1	Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.	**Consistent:** This Draft EIR's evaluation of potential impacts on biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the policy of using the best available information to evaluate impacts on biological resources. Refer to Section 3.3, Biological Resources, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 8.1.4	Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.	**Consistent:** This Draft EIR evaluates the proposed project's potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.2	Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.	**Consistent:** The proposed project site includes an existing Wetland Preserve that coincides with the highest quality habitat within the project site. This is consistent with the objective of balancing the preservation of natural habitat areas with new development.
	Policy 8.2.1	Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats or with areas potentially occupied by vernal pools (see Figure 8-2) shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.	**Consistent:** The project site contains wetlands. This Draft EIR includes biological and wetland analysis conducted by Huffman-Broadway Group, a biological consulting firm. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.3	Protect natural drainages and riparian corridors within the American Canyon Planning Area.	**Consistent:** The proposed project site includes an existing Wetland Preserve that contains a segment of No Name Creek. This is consistent with the objective of

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			protecting natural drainages and riparian corridors.
	Policy 8.3.1	Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards: a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones. b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g." c. Where riparian corridors are retained, they shall be protected by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy (see policy 8.3.2). d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible. e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment. f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible. g. Future development shall utilize appropriate open space or conservation easements in order	**Consistent:** The proposed project is designed in a manner to locate buildings and infrastructure away from the highest quality wetlands that are located in the western portion of the site. The highest quality wetlands are located within an existing Wetland Preserve. Finally, the reach of No Name Creek located within the project site is within the existing Wetland Preserve. The wetlands impacted by the project cannot be avoided due to their location; however, their loss would be offset through the creation of compensatory wetlands in the preserve. Lastly, the proposed project would be required to obtain approvals from USACE, CDFW, and Regional Water Quality Control Board (RWQCB) and adhere to all provisions of those permits. For these reasons, the proposed project is consistent with the provisions of this policy.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		to protect sensitive species or their habitats. h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands and riparian habitats (pursuant to the Federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq*.) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Game and/or Army Corp. of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be effected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an appropriate conservation easement or dedication.	
	Policy 8.3.2	Prohibit development and grading that alters the biological integrity of the Riparian Corridors as depicted on the Biological Habitats Map, unless no feasible alternative exists or the damaged habitat is replaced with habitat of equivalent value. Development that is permitted within Riparian Corridors shall: a. minimize removal of vegetation, erosion, sedimentation and runoff by appropriate protection or vegetation and landscape; b. provide for sufficient passage of native and anadromous fish; c. minimize wastewater discharges and entrapment;	**Consistent:** A segment of No Name Creek is located within the proposed Wetland Preserve. For those riparian areas located where development is proposed, mitigation is proposed requiring any impacted riparian areas to be offset through restoration of comparable habitat within the Wetland Preserve. The features impacted by the project cannot be avoided due to their location; however, their loss would be offset through the creation of compensatory features in the preserve.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		d. prevent ground water depletion or substantial interference with surface and subsurface flows; e. provide for natural vegetation buffers; f. minimize the channelization of streams and other watercourses; g. provide for the enhancement of riparian corridors.	
	Policy 8.3.3	Permit only the following uses within retained Riparian Corridors: a. education and research, excluding buildings and other structures; b. passive (non-motorized) recreation; c. trails and scenic overlooks on public land(s) if located outside of undeveloped buffer zones; d. fish and wildlife management activities; e. necessary water supply projects; f. resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code; g. flood control projects where no other methods are available to protect the public safety; h. bridges when supports are not in significant conflict with riparian resources; and i. underground utilities.	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained and, consistent with the approved Management Plan, would be available for education and research and wildlife management activities.
	Policy 8.3.5	Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained by the proposed project. As such, it would be consistent with the policy of establishing of a network of open spaces along the City's natural drainages and riparian corridors.
	Policy 8.3.6	Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained by the proposed project. As such, it would be consistent with the policy of

Element	Goal/Objective/Policy No.	Goal/Objective/Policy Text	Consistency Determination
		and greenbelts along their lengths throughout the City.	preserving and integrating natural drainages in new development.
	Objective 8.4	Protect local vernal pools as well as the habitats of endangered species living within American Canyon's Planning Area.	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained by the proposed project and would include vernal pools and the highest quality habitat with the project site. The vernal pools impacted by the project cannot be avoided due to their location; however, their loss would be offset through the creation of compensatory features in the preserve. As such, it would be consistent with the policy of protecting vernal pools and habitats of special-status species.
	Policy 8.4.1	Require that development plans incorporate all reasonable mitigation measures to avoid significantly impacting vernal pools for projects located within American Canyon's Planning Area.	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained by the proposed project and would include vernal pools. For those vernal pools located where development is proposed, mitigation is proposed requiring any impacted resources to be offset through restoration of comparable habitat within the Wetland Preserve.
	Policy 8.4.2	Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.	**Consistent:** The proposed Wetland Preserve that includes a segment of No Name Creek would be maintained by the proposed project and includes the highest quality habitat for special-status species with the project site. As such, it would be consistent with the policy of preserving habitats of special-status species.
Geology	Goal 9	Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study and compliance with the latest adopted edition of the California Building Standards Code

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			to reduce the potential level of death, injury, property damage, and economic and social dislocation to acceptable levels. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Goal 9C	Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study and compliance with the latest adopted edition of the California Building Standards Code to ensure that seismic hazards are properly mitigated or avoided entirely prior to development. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.1	Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study and compliance with the latest adopted edition of the California Building Standards Code to protect life, ensure public safety, and substantially reduce damage to structures. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.1.1	Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study to determine to location of the fault and identify appropriate setbacks for project buildings. This is consistent with the requirements of this policy. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
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	Policy 9.1.2	Implement mandatory development restrictions and investigation requirements (by the State, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault zone located within American Canyon and its Planning Area.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study to determine to location of the fault and identify appropriate setbacks for project buildings in accordance with the Alquist-Priolo Act. This is consistent with the requirements of this policy. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.1.3	Require that any building intended to have occupancy be located at least 5O feet from either side of an active or potentially active fault.	**Consistent:** The West Napa Fault crosses the project site. This Draft EIR requires mitigation measures consisting of a fault investigation study to determine to location of the fault and identify appropriate setbacks for proposed project buildings. This is consistent with the requirements of this policy. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.2	Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.	**Consistent:** This Draft EIR requires compliance with the latest adopted edition of the California Building Standards Code to ensure that strong seismic ground shaking hazards are properly mitigated. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.2.1	Require that development be designed in accordance with seismic requirements of the Uniform Building Code.	**Consistent:** This Draft EIR requires compliance with the latest adopted edition of the California Building Standards Code seismic design requirements. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.3	Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.	**Consistent:** The project site is underlain by geologic units and soils that would not be susceptible to liquefaction. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 9.3.1	Avoid development in areas with known liquefaction risk. If these areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.	**Consistent:** The project site is underlain by geologic units and soils that would not be susceptible to liquefaction. Refer to Section 3.5, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.6	Minimize to the greatest extent feasible the loss of life, serious injuries, and major social and economic disruption caused by the collapse of, or severe damage to, vulnerable structures (e.g., buildings, bridges, water storage facilities, key railroad components) resulting from an earthquake.	**Consistent:** Project structures and infrastructure would be designed and constructed in accordance with the latest adopted edition of the California Building Standard Code's seismic safety requirements. Adherence to these standards would minimize potential exposure to disruptions associated with earthquakes.
Flood Hazards	Goal 10	Protect the lives and property of American Canyon's residents and visitors from flood hazards.	**Consistent:** The developable portions of the project site are located outside of a 100-year flood hazard area. Therefore, the proposed project's uses (including employees) would not be exposed to flood hazards.
	Objective 10.1	Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.	**Consistent:** The developable portions of the project site are located outside of a 100-year flood hazard area. Therefore, the proposed project's uses (including employees) would not be exposed to flood hazards.
	Policy 10.1.1	Retain and enhance natural watercourses, including perennial and intermittent streams, as the City's primary flood control channels whenever feasible.	**Consistent:** The western portion of the project site, which contains areas located within a 100-year flood hazard area, is protected within the existing Wetland Preserve. This is consistent with the policy of retaining and enhancing natural watercourses as the City's primary flood control channels.
	Policy 10.1.4	Ensure that stormwater drainage is designed for peak flow conditions.	**Consistent:** The proposed project's storm drainage system would be designed in accordance with the City's peak flow design standards.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 10.1.5	Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer (see Figure 10-1).	**Consistent:** The developable portions of the project site are located outside of a 100-year flood hazard area. Therefore, the proposed project's structures would not be located within the 100-year floodplain.
	Policy 10.1.12	Require that proposed developments within the 100-year floodplain submit information regarding the flood hazard prepared by a qualified Civil Engineer or Hydrologist.	**Consistent:** The developable portions of the project site are located outside of a 100-year flood hazard area. The western portion of the project site, which contains areas located within a 100-year flood hazard area, is located within the proposed Wetland Preserve.
	Policy 10.1.13	Require that proposed developments within the 100-year floodplain submit plans to adequately mitigate flood hazards and demonstrate that such improvements will not create or increase downstream or upstream flood hazards.	**Consistent:** The developable portions of the project site are located outside of a 100-year flood hazard area. The western portion of the project site, which contains areas located within a 100-year flood hazard area, is located within the proposed Wetland Preserve.
Noise	Goal 11	Ensure that American Canyon's existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels created by stationary and ambient (intrusive) noise sources and conditions. Take all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts. Mitigation is proposed as necessary to achieve acceptable noise levels. Refer to Section 3.10, Noise, for further discussion.
	Objective 11.1	Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts including ambient and stationary noise sources. Refer to Section 3.10, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 11.1.1	Promote noise compatible land use relationships by implementing the noise standards identified in Figure 11-2, to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts and assesses noise levels against the standards identified in Figure 11-2 to determine whether significant impacts would occur. Mitigation is proposed as necessary to achieve acceptable noise levels. Refer to Section 3.10, Noise, for further discussion.
	Policy 11.1.2	Monitor and update available data regarding the community's ambient and stationary noise levels.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts. As part of this analysis, noise measurements were taken in the project vicinity. This is consistent with the policy of monitoring and updating noise level data. Refer to Section 3.10, Noise, for further discussion.
	Objective 11.2	Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts. Mitigation is proposed as necessary to achieve acceptable noise levels. Refer to Section 3.10, Noise, for further discussion.
	Policy 11.2.1	Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 are likely to be exceeded, submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.	**Consistent:** The project site is not located in any "Sensitive Noise Areas" depicted on Figure 11-2. Regardless, a noise analysis was prepared for the proposed project and mitigation is identified as necessary. Refer to Section 3.10, Noise, for further discussion.
	Policy 11.2.4	Require that new industrial, commercial and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dB(A) in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Additionally, require that potentially significant noise generators, including uses such as	**Consistent:** The project site is located in the Green Island Business Park, which contains noise-tolerant nonresidential uses. There are no nearby noise-sensitive receptors. The proposed project would not have the potential to increase ambient noise levels above 65 dBA L_{dn}.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or b) the proposed noise source could violate the noise provisions of the General Plan or City Noise ordinance.	
	Objective 11.3	Minimize the adverse impacts of traffic-generated noise on residential and other "noise sensitive" uses as depicted on Figure 11-5.	**Consistent:** The project site is located in the Green Island Business Park and there are no noise-sensitive uses within 1,000 feet of the project site. Moreover, trucks traveling to and from the project site would use Green Island Road or Devlin Road and South Kelly Road to reach SR-29 and SR-12, which would avoid areas designated for residential use by the General Plan.
	Policy 11.3.1	Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies: a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned. b. Mitigate traffic volumes and vehicle speed through residential neighborhoods. c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.	**Consistent:** The project site is located in the Green Island Business Park and trucks would use Green Island Road or Devlin Road and South Kelly Road to reach SR-29 and SR-12. This routing would avoid residential areas and, therefore, would be consistent with this policy.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 11.3.2	Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from "noise-sensitive" land uses to the greatest degree practicable.	**Consistent:** The project site is located in the Green Island Business Park, which contains noise-tolerant nonresidential uses. There are no nearby noise-sensitive receptors. Thus, the proposed project would not need to configure ingress and egress points to divert traffic away from "noise-sensitive" land uses.
	Policy 11.4.1	Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5).	**Consistent:** A portion of the project site is located within the 65 dBA CNEL contour of Napa County Airport. The proposed project consists of industrial uses and the site includes an existing wetland preserve use, which are "normally acceptable" land use activities within this noise contour.
	Policy 11.4.2	Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUCP).	**Consistent:** The Napa County ALUCP identifies aviation noise levels between 60 and 65 dBA CNEL as "normally acceptable" for warehouse uses. As such, the proposed project would be consistent with the ALUCP noise standards.
	Objective 11.5	Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or "noise-sensitive" uses.	**Consistent:** The project site is located in the Green Island Business Park, which contains noise-tolerant nonresidential uses. As such, the proposed project would not have the potential to cause "spillover" noise into adjoining residential neighborhoods or "noise-sensitive" uses.
	Objective 11.7	Minimize the impacts of construction noise on adjacent uses.	**Consistent:** The project site is located in the Green Island Business Park, which contains noise-tolerant nonresidential uses. As such, surrounding land uses would not experience intrusive noise levels during project-related construction activities.
Source: City of American Canyon 2021; FirstCarbon Solutions (FCS) 2021.			

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Municipal Code Consistency

Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.

Impact Analysis

The proposed project would consist of the development of up to 2.4 million square feet of high-cube warehouse on 163 acres. The remaining 45 acres would be preserved as wetlands.

Phase 1

The applicant has developed site design-level plans for Phase 1, the 94.7-acre area east of the Devlin Road extension. This area will support two high-cube warehouse buildings totaling 1,069,904 square feet. One of the buildings would be rail-served by the adjacent Napa Branch Line. Each building would provide docks, grade-level roll-up doors, and trailer parking stalls. The facility would be enclosed with a secure perimeter and access would be restricted to authorized users.

The Phase 1 end uses would be consistent with the types of permitted uses set forth in the Zoning Ordinance for the General Industrial zoning district. Additionally, Phase 1 would have a 0.26 FAR and would be within the Zoning Ordinance's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses. The proposed high-cube warehouses would have 36 feet clear height and, thus, be within the 40-foot height limit set by the Zoning Ordinance. Impacts would be less than significant.

Phase 2

Phase 2, the 113.1-acre area west of Devlin Road, is conceptually proposed for the remaining 1.3 million square feet of high-cube warehouse.

The Phase 2 end uses would be consistent with the types of permitted uses set forth in the Zoning Ordinance for the General Industrial zoning district. Additionally, Phase 2 would have a 0.26 FAR and would be within the General Plan's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Airport Land Use Compatibility Plan Consistency

Impact LU-3:	**The proposed project may conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.**

Impact Analysis

Phases 1 and 2

Airport Land Use Compatibility Review

The project site falls within the Napa County Airport Land Use Compatibility Plan (ALUCP) Area.

The (ALUCP) establishes policies and compatibility zones addressing four key focus areas: noise, safety, airspace protection, and overflight. The (ALUCP) defines five compatibility zones that address the key focus areas in a composite manner:

- Zone A encompasses the Runway Protection Zones and areas lateral to the runway.
- Zone B includes the approach/departure zone where aircraft will be below 100 feet above ground.
- Zone C is defined by the extended approach/departure zone where aircraft will be below 300 feet above ground level.
- Zone D encompasses the common traffic pattern. These areas are routinely overflown by aircraft.
- Zone E includes the other airport environs and defines the Airport's influence area and ALUC's planning area.

The project site falls entirely within Zone D. Zone D is characterized by moderate risk, frequent noise intrusion and routine overflights below 1,000 feet above ground level. The ALUCP indicates that warehousing, low intensity light industrial uses and office uses are normally acceptable uses. ALUCP Table 3-2, Airport Vicinity Land Use Compatibility Criteria, establishes maximum densities for indoor and outdoor uses. Within Zone D, indoor uses are limited to no more than 100 people per net acre. Uses with an outdoor component can have up to 150 per net acre. The ALUCP does not limit the number of people that can be clustered in any one acre of the parcel within Zone D. Net acreage is defined as the total site area inclusive of parking areas and landscaping, less the area dedicated for streets.

Additionally, the ALUCP prohibits residential uses and uses posing hazards to flight. Hazards to flight include objects that penetrate FAR Part 77 airspace surfaces, uses that would attract large numbers of birds, and uses that would create smoke, glare, distracting lights, or electronic interference.

The analysis that follows assesses the ALUCP density and airspace criteria that relate to the project site.

Maximum Density

The proposed project includes several buildings that would facilitate development of industrial uses, including warehousing, manufacturing, and general office uses. These land uses are generally consistent with ALUCP criteria, provided that the uses do not attract large concentrations of people.

The ALUCP sets forth maximum density criterion of 100 people per net acre for Zone D. The ALUCP identifies three methods for calculating density: (1) parking ordinance; (2) maximum occupancy; and (3) other methodologies in cases where density cannot be reasonably estimated based upon parking or square footage. The ALUCP identifies the parking ordinance methodology as the preferred method for calculating density.

In this case, the parking ordinance methodology would not be appropriate because parking stalls would be used for trailer storage,[1] which provides no insight into the maximum number of persons on-site at any given time. Thus, it is not possible to meaningfully calculate density using the parking ordinance methodology.

The maximum occupancy methodology is most appropriate because it is based on typical Building Code occupancy limits, which can be calculated based on the known project characteristics. Because the ancillary office space within each building is the most intense use, it has been broken out separately from the warehouse use.[2] Table 3.9-3 summarizes the maximum occupancy calculation.

Table 3.9-3: Maximum Occupancy Calculation

Use	Maximum Square Feet	Maximum Floor Area Allowances per Occupant (California Building Code)	Density (Persons)
Warehouse	2,304,000	1 person/500 square feet (Gross)	4,608
Ancillary Office	96,000	1 person/100 square feet (Gross)	960
Total	*2,400,000*	–	*5,568*
Adjustment for Observed Occupancy (50 percent)			5,568 x .5
Adjusted Density			**2,784**

Notes:
Maximum Floor Area Allowances Per Occupant values obtained from California Airport Planning Land Use Handbook (Exhibit G1).
50 percent reduction applied to subtotal to reflect actual observed occupancy rates in accordance with California Airport Planning Land Use Handbook Guidance (Exhibit G2).
Source: FirstCarbon Solutions (FCS) 2021.

[1] Warehouse end users typically have provisions in their contractual agreements with trucking companies that require empty trailers to be left on-site when loaded trailers are picked up.

[2] Phase 1 is proposed for two warehouse buildings. Phase 2 was assumed to have as many as four warehouse buildings. Thus, 16,000 square feet of ancillary office per warehouse x 6 warehouses = 96,000 square feet.

Table 3.9-4 summarizes the maximum site density calculation. As shown in Table 3.9-4, the project complies with the density recommendation of no more than 100 persons per net acre. Note that the Caltrans Airport Land Use Planning Handbook was used as a technical resource in the context of the density calculations.

Table 3.9-4: Maximum Site Density Calculation

Maximum Site Density (≤ 100 persons/acre)		
Calculation	**Density**	**Maximum Allowable Density**
2,784 persons ÷ 163 acres	17.1 persons/acre	100.0 persons/acre

Notes:
Calculations follow guidance provided in Exhibit G2 of California Airport Planning Land Use Handbook.
Source: FirstCarbon Solutions (FCS) 2021.

Wildlife Attractants

Approximately 45 acres of the project site would be permanently preserved as a Wetland Preserve. This area contains wetlands that currently attract wildlife (e.g., avian species). Avian species are considered potential hazards to aviation activities due to the potential for bird strikes. The two aspects of the proposed project that have the greatest potential for creating aviation safety hazards are the open space area and the stormwater basins.

The open space area would represent the continuation of an existing condition. The proposed project would create new wetland features to offset those impacted as result of the proposed project. However, it would not substantially increase the bird attractant potential because the new compensatory wetlands represent a small portion of the total open space area. Thus, the proposed project would not introduce new aviation hazards in this respect.

The proposed stormwater basins would be designed to drain out within 48 hours of a 10-year storm event. This rapid drainage rate would minimize the amount of time the basins would hold standing water, which, in turn, would reduce their avian attractant attributes. Additionally, standing water would be prevalent in many areas in the project vicinity during and immediately after a storm event; thus, the basins would not represent a greater attractant in this respect. Moreover, the basins are not intended to hold water for extended periods or to be used as an aesthetic water feature.

Furthermore, the proposed project would result in an approximately 163-acre reduction in avian foraging habitat as a result of the development of the proposed structures and infrastructure. This would further minimize the avian attractant attributes of the project site relative to existing conditions.

Overall, the proposed project would not increase the avian attractant attributes of the project site or nearby areas under the Napa County Airport flight path compared to existing conditions.

The ALUCP indicates that projects that have the potential to attract wildlife are required to prepare a Wildlife Hazards Assessment. Accordingly, Mitigation Measure LU-3 requires the preparation of such an assessment and implementation of the recommendations into the design of the open space area.

This would serve to minimize, if not eliminate, the wildlife attractant attributes in a manner that reduces impacts to a level of less than significant.

Light, Glare, Dust, Steam, and Other Aviation Hazards

The ALUCP Policy 3.3.5 states the following:

> Policy 3.3.5: Land uses which may produce hazards to aircraft in flight shall not be permitted within any airport's planning area. Specific characteristics to be avoided include: (1) glare or distracting lights which could be mistaken for airport lights; (2) sources of dust, steam, or smoke which may impair pilot visibility; (3) sources of electrical interference with aircraft communications or navigation; and (4) any use which may attract large flocks of birds, especially landfills and certain agricultural uses.

The proposed project's end uses include high-cube warehouse and ancillary office, which are considered normally acceptable by the ALUCP as long as they do not create hazards. In this case, MM AES-3 requires all exterior lighting to use full cut-off fixtures and be directed downward to prevent interference with Napa County Airport operations. Moreover, the proposed project would reduce the amount of natural vegetation on the project site by 163 acres. The proposed project also would include landscaping and on-site drainage facilities that would be designed and managed to discourage wildlife use of the site. MM LU-3 requires the applicant to retain a qualified Biologist to prepare a wildlife hazard assessment that would identify measures to reduce the bird attractant potential of the wetland area, consistent with the ALUCP's policies. Collectively, the implementation of these two mitigation measures would ensure that the proposed project would not create hazards to aviation. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure AES-3 and:

MM LU-3 Prior to issuance of grading permits, the applicant shall retain a qualified Biologist to assess potential wildlife hazards to aviation. The assessment shall evaluate the characteristics of the emergent wetlands, drainages, other potential wildlife attractant features (i.e., ponded water) located within the open space area and identify management practices (e.g., storm drainage, vegetation, etc.) to prevent the creation of attractants for large flocks or birds or other wildlife species that may present safety hazards to aviation activities. As part of the assessment, the applicant shall consult with Napa County Airport and Napa County Airport Land Use Commission (ALUC) representatives, as appropriate, regarding findings and recommendations. The applicant shall submit a report to the City of American Canyon prepared by a qualified Biologist that confirms the wildlife hazard assessment's findings and recommendations are incorporated into the design of the open space preserve.

Level of Significance After Mitigation

Less than significant impact.

3.10 - Noise

3.10.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on noise modeling performed by FirstCarbon Solutions (FCS). The noise modeling output is included in this Draft Environmental Impact Report (Draft EIR) as Appendix G.

3.10.2 - Environmental Setting

Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. *Pitch* is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. *Loudness* is the intensity or amplitude of sound.

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit that expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. One such specific “filtering” of sound is called “A-weighting.” A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various intervals, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise

Equivalent Level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric conditions (wind, temperature gradients, and humidity) and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation, or sound drop-off rate, is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance (dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone, and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.10-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.10-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Term	Definition
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7 p.m. and 10 p.m. and 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS) 2021.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is “barely perceptible”; for reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at

commercial, industrial, manufacturing, or institutional facilities. Furthermore, noise generated by the use of motor vehicles over public roads is preempted from local regulation, although the use of these vehicles is considered a stationary noise source when operated on private property such as at a construction site, a truck terminal, or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, or dense landscaping or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation or with provision of intervening structures, barriers, or topography.

Construction activities are a common source of stationary noise. Construction period noise levels are higher than background ambient noise levels but cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.10-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.10-2: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	95
Auger Drill Rig	85
Vibratory Pile Driver	95
Jackhammers	85
Pneumatic Tools	85
Pumps	77
Scrapers	85
Cranes	85
Portable Generators	82
Rollers	85
Bulldozers	85
Tractors	84
Front-End Loaders	80
Backhoe	80
Excavators	85

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Graders	85
Air Compressors	80
Dump Truck	84
Concrete Mixer Truck	85
Pickup Truck	55

Notes:
dBA = A-weighted decibel
Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook, August.

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source. If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibration consists of rapidly fluctuating motion through a solid medium, specifically the ground, which has an average motion of zero and in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The effects of groundborne vibration typically only cause a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors, where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 microinch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB."

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 microinch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving, and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 3.10-3.[1]

Table 3.10-3: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer—Small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—Large	0.089	87
Caisson Drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam Shovel Drop	0.202	94

[1] Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112

Notes:
PPV = peak particle velocity
rms = root mean square
Source: Compilation of scientific and academic literature, generated by the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- **Vibration source:** Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- **Vibration path:** Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- **Vibration receiver:** Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side, and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes in order to identify potential vibration impacts that may

need to be studied through actual field tests. The vibration level (calculated below as "PPV") at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

PPV_{ref} = reference measurement at 25 feet from vibration source
D = distance from equipment to the receptor
n = vibration attenuation rate through ground

According to Section 7 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.[2]

Existing Noise Levels

The project site is located in the City of American Canyon, Napa County, California. The project site is bounded by industrial development in the Green Island Business Park (west), the Napa Logistics Park and Devlin Road (north), the Napa Branch Line railroad (east), and Green Island Road, a stone supply business, and a wine distribution warehouse (south). Napa County Airport is located approximately 1 mile north of the project site. The dominant noise sources in the project vicinity is traffic on local roadways in the project vicinity and railroad and airport activity.

Existing traffic noise levels along selected roadway segments in the project vicinity were modeled using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The daily traffic volumes were obtained from the traffic analysis prepared for the proposed project by W-Trans.[3] The traffic volumes described here correspond to the existing without project conditions traffic scenario as described in the transportation analysis. The model inputs and outputs—including the 60 dBA, 65 dBA, and 70 dBA CNEL noise contour distances—are provided in the Appendix G of this document. A summary of the modeling results is shown in Table 3.10-4.

The results show that traffic noise levels along Green Island Road adjacent to the project site range up to 62 dBA L_{dn}. The project's nearest façade is located over 960 feet west of the centerline of State Route (SR) 29. At this distance traffic noise levels on SR-29 would attenuate to below 52 dBA L_{dn}. Therefore, the dominant noise source on the project site would be traffic noise on Green Island Road.

Table 3.10-4: Existing Traffic Noise Levels

Roadway Segment	Approximate ADT	Centerline to 70 L_{dn} (feet)	Centerline to 65 L_{dn} (feet)	Centerline to 60 L_{dn} (feet)	L_{dn} (dBA) 50 feet from Centerline of Outermost Lane
Paoli Loop Road–south of Green Island Road	3,000	< 50	< 50	55	59.9

[2] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.
[3] W-Trans. 2021. Traffic Impact Study for the Giovannoni Logistics Center. July.

Roadway Segment	Approximate ADT	Centerline to 70 L_{dn} (feet)	Centerline to 65 L_{dn} (feet)	Centerline to 60 L_{dn} (feet)	L_{dn} (dBA) 50 feet from Centerline of Outermost Lane
Green Island Road–Paoli Loop Road to future Devlin Road	4,800	< 50	< 50	76	62.0
Green Island Road–west of future Devlin Road	4,800	< 50	< 50	76	62.0
South Kelly Road–SR-29 to Devlin Road	1,400	< 50	< 50	< 50	56.6
SR-29–South Kelly Road to Green Island Road	30,900	128	273	586	73.8

Notes:
ADT = Average Daily Traffic
L_{dn} = day/night average sound level
dBA = A-weighted decibel
[1] The ADT values are calculated based on the PM peak-hour traffic volumes multiplied by a factor of 10.
[2] Modeling results do not take into account mitigating features such as topography, vegetative screening, fencing, building design, or structure screening. Rather, they assume a worst-case scenario of having a direct line of site on flat terrain.
Source: FirstCarbon Solutions (FCS) 2021.

3.10.3 - Regulatory Framework

Federal

Noise Control Act

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees.

Among the agencies now regulating noise are the Occupational Safety and Health Administration (OSHA), which limits noise exposure of workers to 90 dB L_{eq} or less for 8 continuous hours or 105 dB L_{eq} or less for 1 continuous hour; the United States Department of Transportation (USDOT), which assumed a significant role in noise control through its various operating agencies; and the Federal Aviation Administration (FAA), which regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the FTA. Transit noise is regulated by the federal Urban Mass Transit Administration, while freeways that are part of the interstate highway system are regulated by the FHWA. Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise-sensitive" uses are either prohibited from being sited adjacent to a highway, or alternatively, that developments are planned and

constructed in such a manner that minimize potential noise impacts.Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise- sensitive" uses are either prohibited from being sited adjacent to a highway, or alternatively, that developments are planned and constructed in such a manner that minimize potential noise impacts.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by transportation sources, local jurisdictions are limited to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

Federal Transit Administration Standards and Guidelines

FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment Manual.[4] The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 3.10-5.

Table 3.10-5: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel, or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90

Notes:
VdB = vibration measured as root mean square (rms) velocity in decibels of 1 microinch-inch per second
PPV = peak particle velocity
Source: Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

State

California General Plan Guidelines

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The Governor's Office of Planning and Research (OPR) has issued and periodically updated advisory General Plan Guidelines that provide suggestions regarding how agencies may want to comply with this statutory requirement. The latest version of the General Plan Guidelines was issued in 2020. It contains an Appendix (D) entitled, Noise Element Guidelines, which were developed in 1976 by the former Department of Health Services Office of Noise Control pursuant to former Health and Safety Code section 46050.1. These Guidelines represent "an additional resource that local governments may consult in addition to this chapter to develop noise elements" (OPR, *General Plan Guidelines*, p. 130 [2020]). One significant model is the "Land Use Category and Community Noise Exposure Matrix,"

[4] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

which allows the local jurisdiction to delineate compatibility of sensitive uses with various incremental levels of noise.[5]

The Noise Element Guidelines rank noise/land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable (Noise Element Guidelines, Figure 2, p. 374). The project is also subject to review under the State of California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines provides questions relating to potential noise impacts that can be used in the formulation of impact thresholds for potential noise and vibration impacts. The City of American Canyon has developed its own CEQA thresholds, which are described in the local regulatory section below.

California Building Standards Code

The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. Referred to as the "State Noise Insulation Standard," it requires buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor-ceiling assemblies must block or absorb sound. For limiting noise from exterior noise sources, the noise insulation standards set an interior standard of 45 dBA CNEL in any habitable room with all doors and windows closed. In addition, the standards require preparation of an acoustical analysis demonstrating the manner in which dwelling units have been designed to meet this interior standard, where such units are proposed in an area with exterior noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

Local

Since the state and federal government have preempted the setting of standards for noise levels that can be emitted by transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning. The applicable sections of the General Plan[6] and Municipal Code[7] are stated below.

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goal of ensuring that American Canyon's existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels

[5] Governor's Office of Planning and Research. Noise Element Guidelines, Appendix D, Figure 2. 2020. Website: https://opr.ca.gov/planning/general-plan/guidelines.html. Accessed June 29, 2021.

[6] City of American Canyon. Noise Element. Accessed June 29th, 2020. Website: https://www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update.

[7] American Canyon Municipal Code. Community Noise. Accessed June 29, 2021. Website: https://qcode.us/codes/americancanyon/.

created by stationary and ambient (intrusive) noise sources and conditions. The City takes all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community. Exhibit 3.10-1 illustrates the acceptable noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 of the General Plan. The objectives and policies relevant to noise that are applicable to the proposed project are:

Objective 11.1 Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.

Policies

Policy 11.1.1 Promote noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 [of the General Plan], to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.

Policy 11.1.2 Monitor and update available data regarding the community's ambient and stationary noise levels.

Objective 11.2 Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.

Policies

Policy 11.2.1 Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 [of the General Plan] are likely to be exceeded, submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.

Policy 11.2.4 Require that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dB(A) in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Additionally, require that potentially significant noise generators, including uses such as night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or b) the proposed noise source could violate the noise provisions of the General Plan or City Noise Ordinance.

Objective 11.3 Minimize the adverse impacts of traffic-generated noise on residential and other "noise-sensitive" uses as depicted on Figure 11-5 [of the General Plan].

Policies

Policy 11.3.1 Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies:

a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
b. Mitigate traffic volumes and vehicle speed through residential neighborhoods.
c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.

Policy 11.3.2 Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from "noise-sensitive" land uses to the greatest degree practicable.

Policy 11.4.1 Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5 [of the General Plan]).

Policy 11.4.1 Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUP).

Objective 11.5 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or "noise-sensitive" uses.

Objective 11.7 Minimize the impacts of construction noise on adjacent uses.

Municipal Code

The City of American Canyon General Plan establishes an exterior noise level criterion of 50 dBA in residential single or double and 55 in residential multiple land uses from 10:00 p.m. to 7:00 a.m. and 60 dBA for all residential land uses from 7:00 a.m. to 10:00 p.m. within outdoor activity areas of residential land uses. Additionally, the City requires that cumulative noise exposure from exterior noise sources within noise-sensitive dwellings not exceed 55 dBA from 10:00 p.m. to 7:00 a.m. and 60 dBA from 7:00 a.m. to 10:00 p.m. The City establishes different exterior noise limits for construction noise impacts for residential land uses to be 75 dBA from 7:00 a.m. to 7:00 p.m. and 60 dBA from 7:00 p.m. to 7:00 a.m.

3.10.4 - Methodology

Noise Assessment

Construction Noise Analysis Methodology

A worst-case scenario was analyzed assuming each piece of modeled equipment would operate simultaneously at the nearest reasonable locations to the closest noise-sensitive receptor for the loudest phase of construction. Noise emission levels recommended by FHWA's Highway Construction Noise Handbook were used to ascertain the noise generated by specific types of construction

equipment. The construction noise impact was evaluated in terms of maximum levels (L_{max}). Analysis requirements were based on the sensitivity of nearby receptors and the Noise Ordinance specifications.

Traffic Noise Modeling Methodology

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. Traffic data used in the model was obtained from the traffic impact analysis prepared for this EIR by W-Trans. The resultant noise levels were weighted and summed over a 24-hour period in order to determine the L_{dn} values. The FHWA-RD-77-108 Model arrives at a predicted noise level through a series of adjustments to the reference energy mean emission level. Adjustments are then made to the reference energy mean emission level to account for the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway); the total Average Daily Traffic (ADT); the percentage of ADT that flows during the day, evening, and night; the travel speed; the vehicle mix on the roadway; a percentage of the volume of automobiles, medium trucks, and heavy trucks; the roadway grade; the angle of view of the observer exposed to the roadway; and the site conditions ("hard" or "soft") as they relate to the absorption of the ground, pavement, or landscaping.

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of traffic noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the FHWA community noise assessment criteria, this change is considered "barely perceptible."

The model analyzed the noise impacts from the nearby roadways onto the project vicinity, which consists of the area that has the potential of being impacted from the on-site noise sources as well as the project-generated traffic on the nearby roadways**.** The roadways were analyzed based on a single-lane-equivalent noise source combining both directions of travel. A single-lane-equivalent noise source is when the vehicular traffic from all lanes is combined into a theoretical single-lane that has a width equal to the distance between the two outside lanes of a roadway, which provides almost identical results to analyzing each lane separately where elevation changes are minimal. The modeling assumes a direct line of sight to the roadway and flat terrain conditions.

Stationary Noise Source Analysis Methodology

The proposed project would generate noise from parking lot activities, new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial uses, and from truck loading and unloading activities. To provide a conservative analysis, the highest end of the range of reference noise levels for these stationary noise sources was used to calculate the reasonable worst-case hourly average noise levels from each noise source. These hourly averages were then assumed to occur for every hour for a 24-hour period to calculate the reasonable worst-case 24-hour average L_{dn} noise levels as measured at the nearest sensitive receptor land use. These individual source noise levels were then combined to calculate the reasonable worst-case combined stationary source 24-

hour L_{dn} noise level as measured at the nearest sensitive receptor land use. These noise levels were then compared to the City's applicable noise performance threshold to determine whether these noise sources would result in a substantial increase in excess of this standard.

Vibration Impact Analysis Methodology

The City of American Canyon does not have adopted criteria for construction or operational groundborne vibration impacts. Therefore, the FTA's vibration impact criteria and modeling and analysis methodology were utilized to evaluate potential vibration impacts. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document,[8] and are summarized in Table 3.10-5. in the regulatory discussion above.

3.10.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether noise impacts are significant. These questions input of planning and environmental professionals at the OPR and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so here, but has also included language consistent with CEQA case law. Thus, noise impacts resulting from the implementation of the proposed project would be considered significant if the project would cause:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in noise-sensitive locations 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;

b) Generation of excessive groundborne vibration or groundborne noise levels;

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.

3.10.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Substantial Noise Increase in Excess of Standards

Impact NOI-1:	**The proposed project could generate a substantial temporary or permanent increase in ambient noise levels in noise-sensitive locations 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.**

[8] Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.

Impact Analysis

Construction

For purposes of this analysis, a significant impact would occur if construction noise impacts were greater than 75 dBA between the hours of 7:00 a.m. and 7:00 p.m. or greater than 60 dBA from 7:00 p.m. to 7:00 a.m., per the City's policies, and would result in a substantial temporary increase in ambient noise levels that could result in annoyance or sleep disturbance of nearby sensitive receptors.

Construction-related Traffic Noise

Noise impacts from construction activities associated with the project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impact that could occur during project construction would result from the increase in traffic flow on local streets associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the ADT hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which, as discussed in the characteristics of nose discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly or daily traffic volumes along any roadway segment in the project vicinity. For this reason, short-term intermittent noise from construction trips would not be expected to result in a perceptible increase in hourly or daily average traffic noise levels in the project vicinity. Therefore, short-term construction-related noise impacts associated with the transportation of workers and equipment to the project site would be less than significant.

Construction Equipment Operational Noise

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.10-2 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers are not expected to be used during construction of this project.

The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical

operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the project is expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. Based on the information provided in Table 3.10-2, the maximum noise level generated by each scraper is assumed to be 85 dBA L_{max} at 50 feet from this equipment. Each bulldozer would also generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq}. The acoustic center reference is used because construction equipment must operate at some distance from one another on a project site and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. The effect on sensitive receptors is evaluated below.

The closest noise-sensitive receptor to the project site construction footprint is the single-family residence located southwest of the project site, on Green Island Road. The closest façade of the residence would be located 1,240 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would operate simultaneously during construction of the proposed parking areas near the project's northeastern boundary. At this distance, construction noise levels could range up to approximately 62 dBA L_{max}, with a relative worst-case hourly average of 57 dBA L_{eq} at this receptor. These noise levels could occur temporarily under the reasonable worst-case scenario of multiple pieces of heavy construction equipment operating simultaneously in relatively the same locations at the nearest project boundary for an hour period.

These construction noise levels are within the construction noise limits established by the City of no greater than 75 dBA during the hours of 7:00 a.m. to 7:00 p.m.; but these levels could exceed the City's nighttime threshold for construction noise of 60 dBA. Therefore, construction activities shall be restricted to daytime hours and best management noise reduction techniques and practices shall be implemented as outlined in Mitigation Measure (MM) NOI-1, to ensure that construction noise would not result in a substantial temporary increase in ambient noise levels that would result in annoyance or sleep disturbance of nearby sensitive receptors. MM NOI-1 would reduce impacts from construction noise by requiring mufflers on construction equipment powered by internal engines, which are the primary source of construction noise. Additionally, MM NOI-1 would require contractors to limit idling times of vehicles with internal combustion engines to 5 minutes or less and utilize quiet mode on air compressors and other stationary noise sources. Furthermore, MM NOI-1 would require contractors to locate stationary noise-generating equipment be located as far away as the equipment allows and also placed such that noise is directed away from adjacent residential homes. Finally, MM NOI-1 would require construction staging areas be located as far away as possible from noise-sensitive receptors nearest the project site and would limit construction activities to the permitted hours Monday through Saturday. The measures outlined in MM NOI-1 would collectively reduce temporary construction noise impacts to a less than significant level.

Operation

Implementation of the project would result in mobile and stationary operational noise sources. Potential noise impacts with these project-related sources are analyzed below.

Mobile Source Operational Noise Impacts

A significant impact would occur if implementation of the proposed project would result in a substantial increase in traffic noise levels compared with traffic noise levels existing without the project. The County does not define what is a substantial increase in traffic noise levels. As noted in the characteristics of noise discussion, audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for purposes of this analysis, a 3 dBA or greater increase above traffic noise levels that would existing without the project would be considered a substantial permanent increase in traffic noise levels.

Table 3.10-6 shows a summary of the traffic noise levels for Existing, Existing Plus Project, Future without the Project, and Future Plus Project traffic conditions, as defined in the traffic study prepared by W-Trans.[9] These modeling results represent the projected traffic noise levels as measured at 50-feet from the centerline of the outermost travel lane of the modeled roadway segment.

Table 3.10-6: Traffic Noise Increase Summary

Roadway Segment	Existing No Project (dBA) L_{dn}	Existing Plus Project (dBA) L_{dn}	Increase from Existing No Project Conditions (dBA)	Future No Project (dBA) L_{dn}	Future Plus Project (dBA) L_{dn}	Increase from Future No Project Conditions (dBA)
Paoli Loop Road–south of Green Island Road	59.9	60.8	0.9	60.8	61.5	0.7
Green Island Road–Paoli Loop Road to future Devlin Road	62.0	63.2	1.2	62.9	63.8	0.9
Green Island Road–west of future Devlin Road	62.0	62.0	0.0	62.9	62.9	0.0
South Kelly Road–SR-29 to Devlin Road	56.6	59.1	2.5	59.0	60.6	1.6
SR-29–South Kelly Road to Green Island Road	73.8	73.9	0.1	76.1	76.2	0.1

Notes:
dBA = A-weighted decibel
L_{dn} = day/night average sound level
Source: FirstCarbon Solutions (FCS) 2021.

[9] W-Trans. 2021. Traffic Impact Study for the Giovannoni Logistics Center. July.

As shown in Table 3.10-6, the highest traffic noise level increase with implementation of the proposed project would occur along South Kelly Road under Existing Plus Project conditions. Along this roadway segment, the proposed project would result in traffic noise levels ranging up to 59.1 dBA L_{dn} as measured at 50 feet from the centerline of the nearest travel lane, representing an increase of 2.5 dBA over existing conditions for this roadway segment.

This increase is less than a 3 dBA or greater increase that would be considered a substantial increase. Therefore, project-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.

Stationary Source Operational Noise Impacts

A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of the City's noise performance standards. The City requires that new industrial, commercial, and related land uses demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses.

The proposed project would generate noise from parking lot activities, new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial uses, and truck loading and unloading activities. Potential impacts from these noise sources are discussed below.

Parking Lot Activities

Typical parking lot activities include people conversing, doors shutting, and vehicles idling which generate noise levels ranging from approximately 60 dBA to 70 dBA L_{max} at 50 feet. These activities are expected to occur sporadically throughout the day as visitors and staff arrive and leave parking lot areas at the project site.

The nearest noise-sensitive receptor is single-family residence located southwest of the project site on Green Island Road. The nearest façade of the residence is located approximately 1,360 feet southwest of the nearest proposed parking areas. With the distance attenuation, noise levels associated with daily parking lot activities would attenuate to approximately 41 dBA L_{max} at this façade. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 24 dBA L_{eq} as measured at this nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 30 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix G.

Therefore, the proposed project's reasonable worst-case parking lot noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA as measured at the nearest receptor. Existing traffic noise levels along Green Island Road are shown in Table3.10-6 to be 62 dBA L_{dn}. Therefore, project parking lot activities would not result in a substantial permanent increase in ambient noise levels in the project vicinity. Because the proposed project would not generate a substantial permanent increase in ambient noise levels in noise-sensitive locations in the vicinity of

the project, and would also not generate 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, the impact of noise produced by project-related parking lot activities to off-site sensitive receptors would be less than significant.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to the proposed rooftop mechanical ventilation systems for the project; therefore, a reference noise level for typical rooftop mechanical ventilation systems was used. Noise levels from commercially available rooftop mechanical ventilation equipment range from 50 dBA to 60 dBA L_{eq} at a distance of 25 feet.

The nearest noise-sensitive receptor is a single-family residence located southwest of the project site on Green Island Road. The nearest façade of the residence is located approximately 1,470 feet southwest of the nearest potential location for proposed rooftop mechanical ventilation equipment. At this distance, noise generated by typical rooftop mechanical ventilation equipment would attenuate to below 22 dBA L_{eq} at the nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 29 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix G.

Therefore, the proposed project's reasonable worst-case mechanical ventilation equipment operations noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA as measured at the nearest receptor. Existing traffic noise levels along Green Island Road are shown in Table 3.10-6 to be 62 dBA L_{dn}. Therefore, noise levels from proposed mechanical ventilation equipment operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity. Because the project would not generate a substantial permanent increase in ambient noise levels in noise-sensitive locations in the vicinity of the project, and would also not generate a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, the impact of noise produced by proposed mechanical ventilation equipment operations to off-site sensitive receptors would be less than significant.

Truck Loading Activities

Noise would be also generated by truck loading and unloading activities at the loading docks along the western side of the proposed building and at the proposed surface level loading areas on the north and south sides of the building. Typical maximum noise levels from truck loading and unloading activity are 70 dBA L_{max} as measured at 50 feet. These maximum noise levels include noise from associated truck loading/unloading activity, including trucks maneuvering, truck trailer loading, truck trailer unloading, backup alarms or beepers, and truck docking noise.

The nearest noise-sensitive receptor is a single-family residence located south of the project site on Green Island Road. The nearest façade of the residence is located approximately 1,600 feet from the nearest loading docks. Assuming a reasonable worst-case scenario of one truck loading operation for every loading stall and every loading dock within a single hour would result in an hourly average noise level of 40 dBA L_{max} and 29 dBA L_{eq} as measured at the nearest façade of the residence. If these

noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 35 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix G.

Therefore, the proposed project's reasonable worst-case truck loading/unloading activity noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA as measured at the nearest receptor. Existing traffic noise levels along Green Island Road are shown in Table3.10-6 to be 62 dBA L_{dn}. Therefore, project truck loading/unloading activities would not result in a substantial permanent increase in ambient noise levels in the project vicinity. Because the proposed project would not generate a substantial permanent increase in ambient noise levels in noise-sensitive locations in the vicinity of the project, and would also not generate 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, the impact of noise produced by project-related parking lot activities to off-site sensitive receptors would be less than significant.

Stationary Source Operational Noise Impact Conclusion

As shown in the analysis above, none of the project stationary operational noise sources would result in an increase of 3 dBA or greater above the City's performance threshold of 65 dBA L_{dn} for stationary noise sources as measured at the nearest sensitive receptor. Therefore, noise impacts from stationary operational noise sources would be less than significant.

Table 3.10-7 provides a summary of the stationary source operation noise impacts. The combined stationary source operational noise levels would not exceed the City's exterior L_{dn} threshold of 65 dBA as measured at the nearest receptor. Therefore, project stationary source operational noise levels would be less than significant.

Table 3.10-7: Stationary Operational Noise Impact Summary

Source (Reference Noise Levels)	Approximate Distance from Source to Nearest Sensitive Receptor (feet)	Operational Noise Level as Measured at the Project Boundary	City's Noise Performance Threshold	Exceed Threshold by 3 dBA or greater? (Yes/No)
Parking Lot Activities (70 dBA L_{max} at 50 feet)	1,360	30 dBA L_{dn}	65 dBA L_{dn}	No
Mechanical Ventilation Equipment (60 dBA L_{eq} at a distance of 25 feet)	1,470	29 dBA L_{dn}	65 dBA L_{dn}	No
Truck Loading and Unloading Activities (80 dBA L_{max} as measured at 50 feet)	1,600	35 dBA L_{dn}	65 dBA L_{dn}	No
Combined Noise Levels	NA	36.9 dBA L_{dn}	65 dBA L_{dn}	No

Notes:
dBA = A-weighted decibel
L_{max} = maximum noise/sound level
L_{dn} = day/night average sound level
Source: FirstCarbon Solutions (FCS) 2021.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Based on the above analysis, impacts from noise generated from stationary operational noise sources would be less than significant. However, project construction activity noise impacts, which could result in a temporary increase in ambient noise levels in the project vicinity that could result in annoyance or sleep disturbance of nearby sensitive receptors, would be reduced to less than significant levels with implementation of the following multi-part mitigation measure.

MM NOI-1 Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers that are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.
- The construction contractor shall ensure that all on-site construction activities, including the operation of any tools or equipment used in construction, drilling, repair, alteration, grading, or demolition work, are limited to between the daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. No construction shall be permitted on Sundays and federal holidays.

Level of Significance After Mitigation

Less than significant impact.

Groundborne Vibration/Noise Levels

Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.

Impact Analysis

This section analyzes both construction and operational groundborne vibration and noise impacts. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Groundborne noise is generated when

vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

The City of American Canyon has not established quantitative groundborne vibration thresholds for construction or operation. Therefore, for purposes of this analysis, the FTA's vibration impact criteria are utilized to analyze vibration impacts. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment Manual.[10] The construction vibration impact criteria are summarized in Table 3.10-5.

Construction

A significant impact would occur if existing structures at the project site or in the project vicinity would be exposed to groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the listed type of structure, as shown in Table 3.10-5.

Of the variety of equipment used during construction, the large vibratory rollers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Large vibratory rollers produce groundborne vibration levels ranging up to 0.201 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The nearest off-site receptors to the project construction footprint where the heaviest construction equipment would operate is the commercial building located south of the project site on Green Island Road. The façade of this structure would be located approximately 120 feet from the nearest point on the project site where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.008 PPV from operation of the types of equipment that would produce the highest vibration levels, which is well below the FTA's Construction Vibration Impact Criteria of 0.2 PPV for this type of structure, which is a building of non-engineered timber and masonry construction. Therefore, the impact of short-term groundborne vibration associated with construction to off-site receptors would be less than significant.

Operation

Implementation of the project would not include any permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity.

The Napa Branch Line railroad is located approximately 130 feet east of the nearest proposed façade of the project. At this distance potential groundborne vibration impacts would be less than significant for the proposed type of structure, based on FTA vibration screening criteria. There are no other existing significant permanent sources of groundborne vibration in the project vicinity to which the proposed project would be exposed. Therefore, project operational groundborne vibration level impacts would be considered less than significant.

[10] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

Level of Significance Before Mitigation

Less than significant impact.

Excessive Noise Levels from Airport Activity

Impact NOI-3: **The proposed project would not expose people residing or working in the project area to excessive noise levels 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.**

Impact Analysis

A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels for a project located in the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The City's Policy 11.4.1 restricts the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses; and Policy 11.4.1 requires that development in the vicinity of Napa Airport comply with the noise standards contained in the ALUP.

The project site is not located within the vicinity of a private airstrip. However, the project is located within 2 miles of a public airport; the Napa County Airport is located approximately 1 mile north of the project site. According to the airport's noise exposure map and shown in Exhibit 3.10-2, the project site is located outside of the 55 dBA CNEL airport noise contours.[11] Therefore, while aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. These noise levels are considered normally acceptable for new industrial land use development within the City as shown in Exhibit 3.10-1. On this basis, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

Level of Significance Before Mitigation

Less than significant impact.

[11] Napa County Airport Master Plan. 2008. Noise Contours 2022. Website: https://www.countyofnapa.org/DocumentCenter/View/1981/Airport-Master-Plan-Environmental-Assessment-NEPA-PDF. Accessed June 30, 2021.

ZONE	LOCATION	IMPACT ELEMENTS	MAXIMUM DENSITIES (8)		
			Residential (1)	Other Structures (people/acre) (2)	
				In Structures	Total in and out of Structures
A (9)	Runway Protection Zone and Primary Surface	•High risk •High Noise Levels •Low overflights below 50' AGL	0	0	10
B	Inner Approach / Departure Zone	•Substantial risk •High Noise Levels •Low overflights below 100' AGL	0	10	25
C	Approach / Departure Zone	•Moderate risk •Substantial Noise •Low overflights below 300' AGL	0	50	75
D	Common Traffic Pattern	•Moderatel risk •Frequent Noise Intrusion •Low overflights below 1,000' AGL	0	100	150
E	Other Airport Environs	•Low risk •Overflight annoyance	See Note 7		

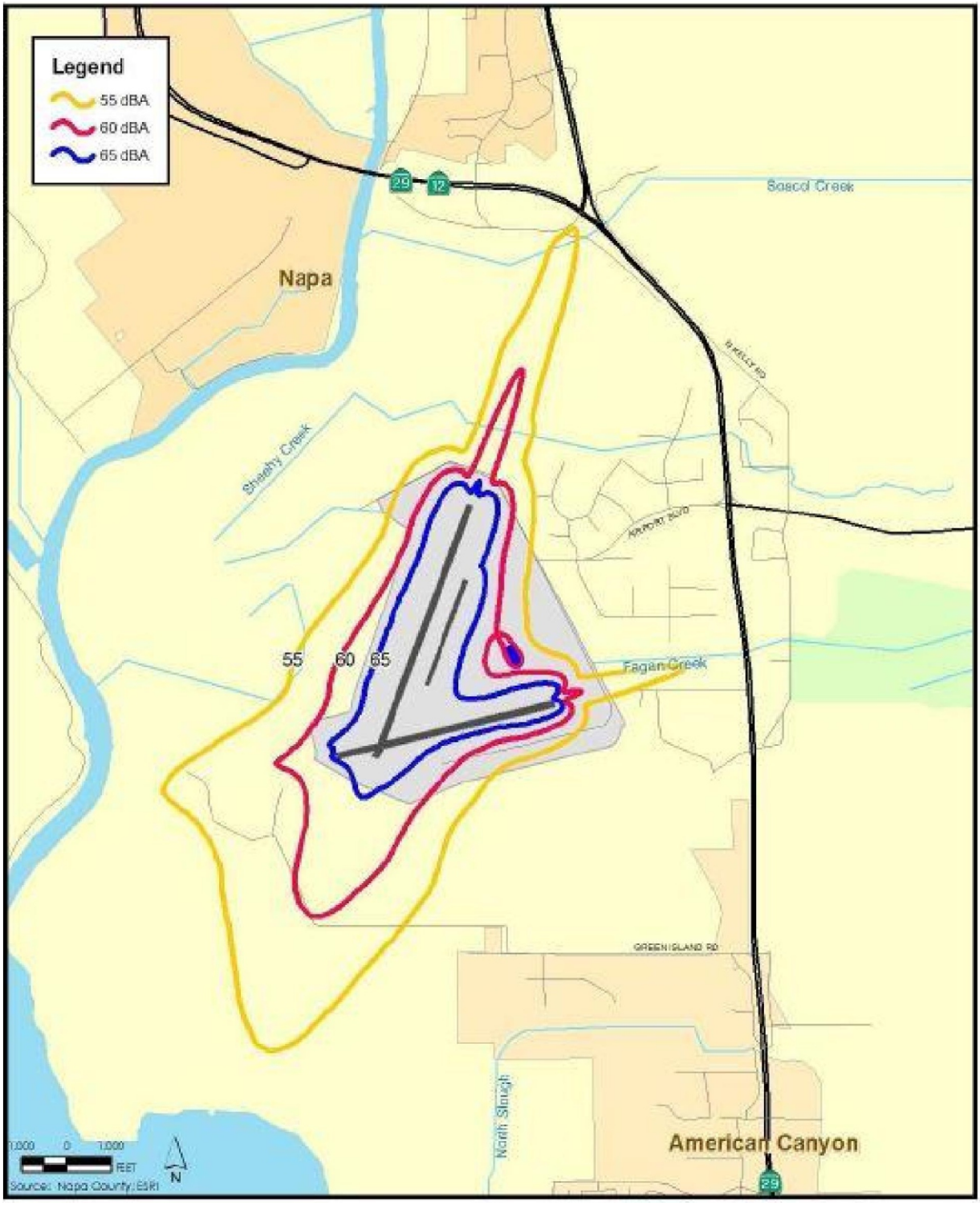
Zone	Prohibited Uses	Other Development Conditions[3]	Examples of Normally Acceptable ses[4]	Examples of Uses not Normally Acceptable[5]
A	• All residential uses • Any assemblage of people • Any new structure which exceeds height limits • Noise-sensitive uses • Uses hazardous to flight[10]	• Avigation easement required	• Pasture, open space • Aircraft tiedowns • Auto parking • Most agricultural uses	• Heavy poles, signs, large trees, etc. • Ponds
B	• All residential uses • Any noise-sensitive uses •Schools, libraries, hospitals, nursing homes, daycare centers • Uses hazardous to flight[10]	• Avigation easement required • Structures to be as far as possible from extended runway centerline • Clustering is encouraged to maximize open land areas • Minimum NLR of 25 dBA in office buildings[6] • Building envelopes and approach surfaces required on all subdivision maps and development plans	• All uses from Zone A • Parks with low-intensity uses, golf courses • Nurseries • Mini-storage	• Retail uses • Office uses (except as accessory uses) • Hotels, motels, resorts • Theaters, assembly halls, and conference centers • Ponds
C	• All residential uses • Schools, libraries, hospitals, nursing homes, daycare centers • Uses hazardous to flight[10] • Landfills	• Avigation easement required • Structures to be set back as far as possible from extended centerline • Clustering is encouraged to maximize open land areas • Building envelopes and approach surfaces required on all subdivision maps • NLR measures may be required for noise-sensitive uses (offices)[6]	• All uses from Zone B • Warehousing and low-intensity light industrial • Small retail uses • Outdoor recreation uses; marina, ballpark • Office uses	• Large retail buildings • Hotels, motels, resorts, health clubs • Restaurants, bars • Multi-story buildings • Theaters, assembly halls, and conference centers • Ponds
D	• All residential uses • Uses hazardous to flight[10]	• Overflight easement or deed notice required[11] • Building envelopes and approach surfaces required on all development plans within 100 feet of approach zones • Clustering is encouraged to maximize open land areas • NLR measures may be required for noise-sensitive uses[6]	• All uses from Zone C • Most nonresidential uses • Accessory daycare centers	• Schools, libraries, hospitals, nursing homes • Large shopping malls • Amphitheaters • Ponds
E	• Noise-sensitive outdoor uses	• Overflight easement or deed notice required[11]	• Any permitted use	• Amphitheaters • Landfills • Ponds

Source: The City of American Canyon General Plan.

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Exhibit 3.10-1
General Plan Noise Element

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Source: Napa County, 2004. The City of American Canyon General Plan.

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Exhibit 3.10-2
Napa County Airport Noise Levels

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3.11 - Public Services

3.11.1 - Introductions

This section describes the existing public services and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information provided by the City of American Canyon General Plan and the South County Region Municipal Service Review and Sphere of Influence Updates.

3.11.2 - Environmental Setting

Fire Protection and Emergency Medical Services

The American Canyon Fire Protection District (Fire District) provides fire protection and emergency medical services to the City of American Canyon as well as nearby unincorporated areas of Napa County. The Fire District's service area encompasses approximately 8 square miles. The Fire District is headquartered at 911 Donaldson Way East (Station 11). The American Canyon City Council serves as the Fire District's Board of Directors.

Stations

The Fire District operates two fire stations: Station 11 (911 Donaldson Way) and Station 2 (225 James Road). Station 2 was reopened in June 2020 after being closed for several years.

Organization

The Fire District is organized into three divisions: Operations, Prevention, and Administration. Operations is the largest division and is responsible for responding to calls for service. Prevention oversees code compliance and conducts inspections through a private contractor. Administration is the principal responsibility of the Fire Chief, and this division oversees field operations, policy reviews, and budgeting.

Services Provided

The Fire District provides emergency operations, fire suppression, advanced life support emergency medical care, and rescue in a public-private partnership with American Medical Response. Other services and functions include fire prevention, public education, business fire safety inspections, plan review, construction site inspection, code enforcement, fire investigation, public education outreach programs, disaster preparedness, emergency operations plan development, emergency operations center operations, and coordination of disaster preparedness training. The Fire District is also recognized by California Emergency Management Agency as a Type 1 (heavy) rescue single resource.

Apparatus

The Fire District has four front line apparatus: three 1,500-gallon-per-minute (gpm) pumper engines and one 1,500-gpm, 75-foot aerial ladder truck (Quint). The Fire District also has air/light/rescue apparatus; command/utility vehicles, inflatable rescue boats, an ambulance, and towable technical rescue equipment trailers.

Staffing

The Fire District has 24 full-time employees including 22 sworn fire fighters and two executive assistants. Twenty fire personnel are assigned to Operations and staff three shifts: A, B, and C. The Fire Chief and Assistant Fire Chief are assigned to Administration along with the executive assistants. The Fire District can supplement its full-time personnel with reserves and volunteers when needed.

Incidents

The Fire District responded to 1,868 incidents in 2021. Rescues and emergency services accounted for 63 percent of the incidents. The Fire District responded to 62 incidents in the industrial area near the Napa County Airport in 2020, with rescue and emergency services accounting for 48 percent of the calls.

Response Times

The Fire District has an established response time standard of first unit arrival within 5 minutes (total travel time) for 90 percent of all incidents. The Fire District responded to 13 percent of calls within 5 minutes in the industrial area near the Napa County Airport in 2021.

Insurance Services Office Rating

The Fire District has an Insurance Services Office (ISO) rating of Class 2 on a scale of 1 to 10, with 1 being the best. An ISO rating accounts for factors such as emergency communication systems, personnel, training, equipment, and water supply.

Police Protection

The American Canyon Police Department (Police Department) provides police protection to the City of American Canyon. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon. The Police Department is headquartered at 911 Donaldson Way East.

Organization

The Sheriff's Office consists of the following divisions: Administration, Operations, and Services. Administration is responsible for policy development and implementation, and overall management of personnel and fiscal resources. Operations is made up of four bureaus: Patrol, Investigations, Special Operations, and Animal Services. The Services Division comprises five bureaus: Technical Services (Records), Property and Evidence, Coroner, Court Services and Transportation.

Staffing

The Police Department is staffed by 24 full-time sworn police officers and 2.7 (full-time-equivalent) civilian personnel. The Police Department consists of one chief (Sheriff's Office Captain), four sergeants, and 19 officers. Two of the officers are assigned to traffic, one is a School Resource Officer, and one is a Community Resource Officer.

Calls for Service

Between 2013 and 2018, the Police Department responded to between 17,057 and 19,703 calls for service annually.

3.11.3 - Regulatory Framework

State

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national and international model codes.
- Building standards that have been adopted and adapted from national and international model code standards to meet California conditions.
- Building standards, authorized by the California legislature, which constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

The California Fire Code is a component of the California Building Standards Code and contains fire-safety-related building standards.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals relevant to public services:

Goal 6A Maintain a high level of fire protection and emergency services to City/District businesses and residents.

Goal 6B Ensure a high level of police protection for the City's residents, businesses, and visitors.

Policies

Policy 6.7.1 Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.

3.11.4 - Methodology

FCS reviewed the City of American Canyon General Plan, the South County Region Municipal Service Review and Sphere of Influence Updates, and the City's website for information about public service providers.

3.11.5 - Thresholds of Significance

Appendix G to the California Environmental Quality Act (CEQA) Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to public services are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based

on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

> 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.
> b) Police protection.
> c) Schools (Refer to Section 7, Effects Found not to be Significant).
> d) Parks (Refer to Section 7, Effects Found not to be Significant).
> e) Other public facilities (Refer to Section 7, Effects Found not to be Significant).

3.11.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Fire Protection

Impact PS-1:	**The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.**

Impact Analysis

Phases 1 and 2

The proposed project would be served with fire protection and emergency medical services provided by the American Canyon Fire Protection District.

The Fire Protection District indicates that the proposed project would increase the number of calls for service, with most being rescue and emergency medical service related. The proposed project would take vehicular access from Green Island Road and the Devlin Road extension, which is currently under construction. All access points would be accessible to large emergency vehicles such as fire engines. This would comply with California Fire Code requirements for emergency vehicle accessibility.

The project site is located 3.1 miles from Station 11, via Paoli Loop Road and Green Island Road. However, emergency responders have the ability to avoid Paoli Loop Road and make a left turn directly onto Green Island Road from State Route (SR) 29. This route reduces the travel distance to 2.2 miles. Using an average travel speed of 35 miles per hour, it would take a fire engine 3 minutes and 46 seconds to reach the project site when responding from Station 11. This would be within the Fire District's 5-minute response time objective. However, congestion on SR-29 may increase travel time such that it exceeds the 5-minute response time objective.

The proposed project would be required to pay two separate special assessments to fund fire protection and emergency medical services. The first is the "Fire Mitigation Fee," a one-time assessment to all new development. The second is the "Fire Service Fee" and an annual assessment for each parcel based on a formula that includes structure construction type, the fire flow area (square feet), proximity of other structures, the type of occupancy, and the presence of fire protection devices.

Because the Fire District's existing facilities are adequate to serve the proposed project, there is no need to develop new or expanded fire protection facilities to serve the project. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Police Protection

Impact PS-2:	**The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.**

Impact Analysis

Phases 1 and 2

The proposed project would be served with police protection provided by the American Canyon Police Department. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon.

The proposed project would be surrounded with a secure perimeter and would only be accessible to authorized users. Depending on the ultimate end user, the site would be accessible via either a mechanical gate with key card access, or a manned security booth. The proposed project would be expected to be staffed 24 hours a day, 7 days a week. Security measures including exterior lighting, alarm systems, and video surveillance would be employed to deter and prevent criminal activity. The Police Department will have the opportunity to review and comment on security measures during the plan check review process. For these reasons, the proposed project would be expected to generate minimal calls for service and, therefore, would not create a need for new or expanded police facilities. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

3.12 - Transportation

3.12.1 - Introduction

This section describes the existing transportation setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on a Traffic Impact Study prepared by W-Trans. The study is provided in Appendix H.

3.12.2 - Environmental Setting

Study Area

The study area consists of the following intersections selected through consultation from City staff:

1. State Route (SR) 29/South Kelly Road
2. Devlin Road/South Kelly Road
3. Devlin Road/Green Island Road (Future Intersection)
4. Paoli Loop Road/Green Island Road

Operating conditions during the weekday AM and PM peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak-hour occurs between 7:00 a.m. and 9:00 a.m. and reflects conditions during the home to work or school commute, while the PM peak-hour occurs between 4:00 p.m. and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

SR-29/South Kelly Road is a signalized four-legged intersection with protected left turns on all approaches. There are crosswalks on the west, north, and east legs.

Devlin Road/South Kelly Road is an all-way stop-controlled intersection with crosswalks on the east and south legs.

Devlin Road/Green Island Road (Future) is a future tee intersection with stop control on the southbound Devlin Road approach. Crosswalks are planned at the north leg.

Paoli Loop Road/Green Island Road is a tee intersection with stop control on the northbound Paoli Loop Road approach. There are no crosswalks.

Exhibit 3.12-1 depicts the study facilities and land configurations.

Intersection Level of Service

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

As explained in detail later in subsection (3.12.3) below, transportation analyses under the California Environmental Quality Act (CEQA) formerly focused on reductions in LOS (dropping from one category [e.g., D] to another [e.g., E or F]), but no longer do. As of early 2019, CEQA expressly forbids lead agencies from measuring adverse transportation effects in terms of "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion" (with an exception not relevant here) (Public Resources Code [PRC], § 21099(b)(2)). Even so, many public agencies still require analyses of proposed projects' potential effects on LOS, but do so under their general police power or General Plan policies, wholly independent of, and separate from, CEQA.

This section addresses LOS issues independent of CEQA, for use by the City of American Canyon for assessing whether and how to impose conditions of approval needed to maintain the reasonable free flow of traffic. In particular, this section addresses LOS in order to ensure that the proposed project complies with Guiding Policy 1.6 of the Circulation Element of the City's General Plan (quoted in full in section 3.12.3 below).

The study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), 6th Edition, Transportation Research Board, 2018. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The LOS for the intersections with side street stop controls, or those that are unsignalized and have one or two stop-controlled approaches, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a LOS for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections with stop signs on all approaches were analyzed using the "All-Way Stop-Controlled" Intersection methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing, and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and then related to an LOS.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the California Department of Transportation (Caltrans).

The ranges of delay associated with the various LOS are indicated in Table 3.12-1.

Table 3.12-1: Intersection Level of Service Criteria

LOS	Two-Way Stop-Controlled	All-Way Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queueing occurs on the minor street.	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach and wait for vehicle to clear from one or more approaches prior to entering the intersection.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 50 seconds. Drivers enter long queues on all approaches.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.
Source: Highway Capacity Manual (HCM). 2018.			

Existing Traffic Operations

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the AM and PM peak-hours. This condition does not include project-generated traffic volumes. Volume data was collected on various dates in February, May, and November 2019 while local schools were in session and prior to the outbreak of COVID-19 and the resulting change in travel patterns. It is noted that travel patterns within American Canyon vary between the AM and PM peak-hours and individual drivers may use different routes for their morning and evening commutes.

As shown in Table 3.12-2, all study intersections are operating acceptably during both peak-hours evaluated under existing conditions. Exhibit 3.12-2 depicts the existing traffic volumes.

Table 3.12-2: Existing Peak-hour Intersection Levels of Service

Study Intersection	AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS
1. SR-29/South Kelly Road	34.6	C	15.9	B
2. Devlin Road/South Kelly Road	7.8	A	8.0	A
3. Devlin Road/Green Island Road	–	–	–	–
4. Paoli Loop Road/Green Island Road Northbound Approach	4.9 13.3	A B	3.1 13.5	A B

Notes:
LOS = Level of Service
Study intersection No. 3 Devlin Road/Green Island Road did not exist in 2015-2020.
Source: W-Trans 2021.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current 5-year period available is October 1, 2015, through September 30, 2020.

As presented in Table 3.12-3, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities Statewide, as reported in the publication 2016 Collision Data on California State Highways, California Department of Transportation (Caltrans). These average rates Statewide are for intersections in the same environment (urban, suburban, or rural), with the same number of approaches (three or four), and the same controls (all-way stop, two-way stop, or traffic signal). A more detailed evaluation is provided for study intersections where the collision rates were higher than the Statewide average.

Table 3.12-3: Collision Rates for the Study Intersections

Study Intersection	Number of Collisions (2015-2020)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. SR-29/South Kelly Road	48	**0.82**	0.58
2. Devlin Road/South Kelly Road	2	0.32	0.55
3. Paoli Loop Road/Green Island Road	2	**0.20**	0.16

Notes:
c/mve = collisions per million vehicles entering
Study intersection No. 3 Devlin Road/Green Island Road did not exist in 2015-2020.
Source: W-Trans 2021.

Of the 48 reported collisions that occurred at the intersection of SR-29/South Kelly Road, 30 were rear-end collisions with the primary cause being unsafe speeds. This type of crash is common at signalized intersections where there is congestion, especially during peak periods. Because of the regional nature of the traffic that causes the congestion, and as this location is under the jurisdiction of Caltrans, there is little that the City can do to address this condition though increased enforcement and analysis of the potential to improve signal timing to reduce congestion could be requested of the Highway Patrol and Caltrans, respectively.

The collision rate at Paoli Loop Road/Green Island Road is higher than the Statewide average, with one of the two reported collisions being a head-on collision and the other being a broadside collision. The broadside collision resulted from "traffic signal and sign" violations, and the head-on collision was attributed to unsafe speed. With no clear pattern and given the very low number of crashes, no remedial actions are apparent.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, sidewalk coverage is limited in the area surrounding the project site. Existing gaps and obstacles along the connecting roadways impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflict points. Within the study area, new sidewalks are planned along the future extension of Devlin Road.

Bicycle Facilities

The *Highway Design Manual* published by Caltrans classifies bikeways into four categories:

- Class I Multiuse Path–a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane–a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route–signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- Class IV Bikeway–also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, Class II bike lanes exist on Devlin Road between Middleton Way and South Kelly Road. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. Table 3.12-4 summarizes the existing and planned bicycle facilities in the project vicinity as contained in the Napa Countywide Bicycle Plan.

Table 3.12-4: Bicycle Facility Summary

Status	Facility	Class	Length (miles)	Beginning Point	Ending Point
Existing	Devlin Road	II	0.09	Middleton Way	South Kelly Road
Planned	South Kelly Road	I	0.20	SR-29	Devlin Road
	Vine Trail	I	1.62	Middleton Way	Watson Lane
	Green Island Road	I	0.33	Vine Trail	Commerce Boulevard
	Green Island Road	II	0.25	Mezzetta Court	Vine Trail
Source: W-Trans 2021.					

Transit Facilities

Valley Intercity Neighborhood Express (VINE) Transit provides fixed route bus service throughout Napa County. American Canyon Transit (ACT) is an on-demand, door-to-door, transit service for persons with disabilities who cannot independently use regular fixed route transit services. Neither VINE nor ACT maintains stops near the project site.

On-demand private taxi services are available in the study area 24 hours a day. Taxis can be used for trips within the local Planning Area and farther destinations, including nearby airports. Other ride-hailing applications are also available in study area and provide transportation throughout the Bay Area.

3.12.3 - Regulatory Framework

State

California Environmental Quality Act

As mentioned in subsection 3.12.2 above, CEQA transportation analyses traditionally used LOS to rank traffic operations on various types of facilities based on traffic volumes and roadway capacity, using a series of letter designations ranging from A to F. In 2013, however, the Legislature passed legislation with the intention of ultimately doing away with LOS in most instances as a basis for environmental analysis under CEQA. Enacted as part of Senate Bill 743 (2013), Public Resources Code Section 21099, subdivision (b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption, proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

Subdivision (b)(2) of Section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA], except in locations specifically identified in the guidelines, if any."

Pursuant to Senate Bill 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018. It became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled [VMT] is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." [1]

California Department of Transportation

The study intersection of SR-29/South Kelly Road is located on the State Transportation Network (STN) and is therefore under jurisdiction of Caltrans. It is noted that Caltrans does not currently have a standard of significance relative to intersection operation as this is no longer a CEQA issue. The new Vehicle Miles Traveled-focused *Transportation Impact Study Guide* (TISG), published in May 2020, replaced the *Guide for the Preparation of Traffic Impact Studies*, 2002. As indicated in the TISG, Caltrans is transitioning away from requesting LOS or other vehicle operations analyses of land use projects and will instead focus on Vehicle Miles Traveled (VMT).

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the State agency responsible for rail safety. The CPUC's jurisdiction includes railroad interlocking plants and public highway grade crossings. CPUC approval is required to modify a railroad interlocking plant (including construction of a new spur track) or modification to an existing public railroad grade crossing. Completion and submittal of a General Order 33-B is required for any proposed work to a railroad interlocking plant (e.g., spur track), and a General Order 88-B is required for any proposed work to a public highway grade crossing.

Regional

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) serves as the transportation planning, coordinating, and financing agency for the nine county San Francisco Bay Area. The MTC created and maintains the Metropolitan Transportation System (MTS), a multimodal system of highways, major arterials, transit services, rail lines, seaports, airports, and transfer hubs that are critical to regional

[1] Subdivision (b)(2) of CEQA Guidelines Section 15064.3 ("transportation projects") provides that "[t]ransportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in [CEQA Guidelines] Section 15152."

transportation between the nine Bay Area counties. MTS facilities within the study area include SR-12, SR-29, and Airport Boulevard. The MTS is incorporated into MTC's 2001 Regional Transportation Plan (RTP) and is used as a guideline in prioritizing for planning and funding of facilities in the Bay Area. Facilities included in the MTS provide access to major Bay Area activity centers, supply convenient and efficient connections, and/or provide alternative routes or modes for congested areas or regions with limited facilities.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan (General Plan) sets forth the following guiding and implementing policies relevant to transportation:

Guiding Policy 1.1 Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community's primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element:

- Encourage and foster a strong sense of community and safety, as well as the "hometown" feeling by creation of a town center through land use and circulation planning.
- Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic LOS and provide a citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile.
- Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement.

Guiding Policy 1.2 Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complimentary intersection improvements to support General Plan buildout conditions. Planned improvements may be phased as development occurs and need for increased capacity is identified.

Guiding Policy 1.3 Design circulation system to focus regional travel on SR-29. SR-29 is important for both Citywide and north–south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a complete streets approach that will expand the travel capacity of SR-29.

Guiding Policy 1.6 Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible and as long as possible.

However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or density planned for in the Land Use Element of the General Plan.

The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy:

- State Route 29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

Guiding Policy 1.9 Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.

Guiding Policy 1.11 Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.

Guiding Policy 1.12 Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.

Implementing Policy 1.14

Work with Caltrans on highway improvements. Continue to work with the Caltrans to achieve timely context sensitive design solutions, funding, and construction of programmed highway improvements.

Implementing Policy 1.17

Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/unincorporated communities as well as pass-through traffic.

Implementing Policy 1.24
Impacts of new development. Based upon the findings of a transportation impact analysis, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation-related impacts.

Implementing Policy 1.35
General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.

Guiding Policy 2.1 Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.

Guiding Policy 2.3 Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.

Implementing Policy 2.7
Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.

Implementing Policy 2.18
Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

Guiding Policy 3.1 Promote safe, efficient, and convenient public transportation. Promote the use of public transportation for daily trips, including to schools and workplaces, as well as other purposes.

Guiding Policy 4.1 Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.

Guiding Policy 4.2 Promote railroad safety. Minimize the safety problems associated with the railroad, including the construction and maintenance of at-grade crossings and the physical barrier effect of the track alignment on the City.

Guiding Policy 4.4 New truck route designation. All highways, arterials, and industrial streets shall be designated truck routes.

Guiding Policy 4.6 Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.

Guiding Policy 4.7 Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.

Performance Standards

The General Plan Circulation Element specifies minimum LOS standards for all streets and intersections in the City's jurisdiction. In Section 4.1.6, the City establishes the following performance standards for acceptable LOS for purposes of compliance with its General Plan:

> Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible for as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or VMT planned for in the Land Use Element of the General Plan.

The locations that may not achieve or maintain LOS D are as follows and will be exempt from the LOS D policy:

- SR-29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

3.12.4 - Methodology

W-Trans prepared a Traffic Impact Study for the proposed project, which is provided in its entirety in Appendix H. The methodology is summarized as follows:

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in Trip Generation Manual, 10th Edition, 2017 for a "High-Cube Transload and Short-Term Storage Warehouse" (Land Use No. 154). The project would be comprised of multiple warehouse buildings with a combined size of between 2.2 and 2.4 million square feet. To be conservative, the maximum size of 2.4 million square feet was used to estimate the trip generation. The project is not anticipated to generate any internal capture trips, pass-by trip credits or any other trip reductions. The number of truck trips associated with a high-cube warehouse was estimated using rates published in the Trip Generation Manual and validated using local vehicle classification counts conducted in June 2021.

As shown in Table 3.12-5, the proposed project is expected to generate an average of 3,888 net-new Passenger Car Equivalent (PCE) trips per day, including 240 trips during the AM peak-hour and 264 during the PM peak-hour. These new trips represent the increase in traffic associated with the

project compared to existing volumes. To account for the effect of heavy vehicles (such as tractor trucks), a heavy vehicle adjustment factor was applied to convert truck trips to an equivalent passenger car trip total. The (PCE) factor for heavy vehicles is assumed to be 2.0 (i.e., each tractor truck has the effect of two passenger cars due to longer start up times at intersections and when making turns). Thus, the number of truck trips per hour was multiplied by 2.0 to determine the equivalent passenger car trips per hour.

Table 3.12-5: Trip Generation Summary

Land Use	Category	Units	Daily		AM Peak-hour				PM Peak-hour			
			Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
High-cube Warehouse	Vehicles (Trucks + Passenger Cars)	2,400 ksf	1.40	3,360	0.08	192	148	44	0.10	240	67	173
	Trucks		0.22	528	0.02	48	37	11	0.01	24	7	17
	Passenger Cars		–	2,832	–	144	111	33	–	216	60	156
	Trucks (Passenger Car Equivalents)		–	1,056	–	96	74	22	–	48	14	34
	Total		**–**	**3,888**	**–**	**240**	**185**	**55**	**–**	**264**	**74**	**190**

Notes:
ksf = 1,000 square feet
Source: W-Trans 2021.

Trip Distribution

The pattern used to allocate new project trips to the street network was determined by reviewing likely routes for employees, visitors, and deliveries. The directionality experienced on SR-29 during the morning and evening commute periods was considered in developing the proposed assumptions. Based on the assumptions shown in Table 3.12-6, the following distribution was applied. Exhibit 3.12-3 depicts project traffic volumes.

Table 3.12-6: Trip Distribution Assumptions

Route	AM		PM	
	Percent	Trips	Percent	Trips
To/From North on SR-29	50%	120	55%	145
To/From South on SR-29	50%	120	45%	119
Total	**100%**	**240**	**100%**	**264**

Source: W-Trans 2021.

3.12.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to transportation are significant. These questions reflect the input of planning and environmental professionals at the OPR and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect related to transportation if the proposed project would:

a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d) Result in inadequate emergency access.

3.12.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Circulation System

Impact TRANS-1:	**The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.**

As explained above, CEQA no longer permits lead agencies to assess the significance of transportation-related effects in terms of the potential worsening of LOS. Yet many agencies, including the City of American Canyon, continue to be concerned about LOS, and have General Plan policies, such as Guiding Policy 1.6. The analysis of LOS-related impacts set forth below has been prepared for purposes of addressing General Plan consistency. The analysis was not undertaken pursuant to CEQA and is not a CEQA analysis. In contrast, the analyses dealing with transit, bicycle, and pedestrian facilities and policies are CEQA analyses.

Impact Analysis

Phases 1 and 2

Existing Plus Project Conditions

Upon the addition of project-related traffic to the Existing volumes, all study intersections are expected to continue operating at LOS C or better. These results are summarized in Table 3.12-7. Exhibit 3.12-4 depicts Existing Plus Project traffic volumes

Table 3.12-7: Existing Plus Project Peak-hour Intersection Levels of Service

Study Intersection	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. SR-29/South Kelly Road	34.6	C	15.9	B	34.7	C	16.7	B
2. Devlin Road/South Kelly Road	7.8	A	8.0	A	8.4	A	7.9	A
3. Devlin Road/Green Island Road Southbound Approach	–	–	–	–	0.5 12.1	A B	1.4 12.7	A B
4. Paoli Loop Road/Green Island Road Northbound Approach	4.9 13.3	A B	3.1 13.5	A B	7.5 17.9	A C	4.0 18.1	A C

Notes:
LOS = Level of Service
Study intersection No. 3 Devlin Road/Green Island Road did not exist in 2015-2020.
Source: W-Trans 2021.

Future Conditions

Future (2040) AM and PM peak-hour volume projections for SR-29/South Kelly Road were derived from a buildout analysis which is contained in the Napa Junction III Transportation Impact Analysis Report, Omni-Means, LTD, 2011; this scenario represents cumulative traffic conditions that would be expected upon build out of the land uses identified in the General Plan. Although some of the anticipated development included in this previous effort may already be complete and occupied, to provide a conservative estimate of future operation the incremental increase in trips associated with build out of the City of American Canyon under its current General Plan was added to current volumes to determine Future (year 2040) operating conditions without the project. A growth rate was then created for the intersection of SR-29/South Kelly Road based on the volumes for this location in the Napa Junction III Transportation Impact Analysis Report.

Because the west side of SR-29 is already nearly built out other than the project site, and so would be expected to experience considerably less of an increase in traffic compared to SR-29, a growth rate of 1 percent per year was used to develop future AM and PM peak-hour volumes for the study intersections located west of SR-29.

Under the anticipated Future volumes, the study intersections are expected to operate acceptably during the AM and PM peak-hours except for SR-29/South Kelly Road, which is expected to operate at LOS F during both peak-hours. Future volumes are shown in Exhibit 3.12-5 and operating conditions are summarized in Table 3.12-8.

While the intersection of SR-29/South Kelly Road is projected to operate at LOS F during each peak-hour, this operation was considered acceptable since SR-29 is exempt from the City's LOS standard and Caltrans no longer applies an LOS standard. The City of American Canyon–Broadway District Specific Plan Draft Environmental Impact Report (EIR), FirstCarbon Solutions, 2017, states that there are future plans for SR-29 to have three through lanes in each direction through American Canyon. Because funding has not been identified for this capacity enhancement, it was conservatively

assumed that the current configuration with only two through lanes in each direction would remain, and this configuration was used for the analysis.

Furthermore, the future year analysis results for facilities along SR-29 (specifically, the intersection of SR-29/South Kelly Road) is deemed to be more conservative than what was presented for this intersection in the Watson Ranch Specific Plan EIR (September 2018) which indicated LOS C and D operation for the AM and PM peak-hours, respectively.

Future Plus Project Conditions

Upon the addition of project-generated traffic to the anticipated Future volumes, all unsignalized study intersections are expected to operate acceptably. SR-29/South Kelly Road would continue to operate at LOS F during both peak-hours. Future Plus Project traffic volumes are shown in Exhibit 3.12-6 and operating conditions are summarized in Table 3.12-8.

Table 3.12-8: Future Plus Project Peak-hour Intersection Levels of Service

Study Intersection	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. SR-29/South Kelly Road	107.4	F	84.3	F	107.0	F	88.7	F
2. Devlin Road/South Kelly Road	8.0	A	8.0	A	8.5	A	7.6	A
3. Devlin Road/Green Island Road Southbound Approach	–	–	–	–	0.4 13.1	A B	1.4 13.9	A B
4. Paoli Loop Road/Green Island Road Northbound Approach	5.2 14.3	A B	3.1 13.4	A B	7.8 19.3	A C	3.7 16.7	A C

Notes:
LOS = Level of Service
Study intersection No. 3 Devlin Road/Green Island Road did not exist in 2015-2020.
Source: W-Trans 2021.

As mentioned previously, there are future plans for SR-29 to have three travel lanes in each direction through American Canyon. As required by the City in their Traffic Impact Fee Program, the proposed project would pay a proportional share fee toward the cost of this planned future infrastructure improvement. As specific building projects move forward, each would be required to contribute to the funds needed for the planned improvements to SR-29 based on the City's fee schedule. Impacts would be less than significant.

Transit

Existing stops are not within an acceptable walking distance of the site, which is generally considered to be 0.5 mile. Should an employee need to use transit, they could ride a bicycle along Devlin Road to the nearest transit stop at the intersection of Airport Boulevard/Devlin Road. This is consistent with the various City of American Canyon General Plan policies that promote transit accessibility. Impacts would be less than significant.

Bicycles

Existing bicycle facilities, including Class II bike lanes on Devlin Road between Middleton Way and South Kelly Road together with shared use of minor streets provide adequate access for bicyclists. The proposed project would include bicycle lanes along the Devlin Road extension and a multimodal path along the north side of Green Island Road. The planned Class I and II bicycle facilities on South Kelly Road and Green Island Road, as well as the Napa Valley Vine Trail along Devlin Road, would improve bicycle connectivity near the project site. This is consistent with the various City of American Canyon General Plan policies that promote bicycle mobility. Impacts would be less than significant.

Pedestrian

Given the nature of the study area and the surrounding industrial land use, it is reasonable to assume that very few project patrons and employees will desire to walk to reach the project site. There may, however, be a desire by employees to walk in the area for recreational purposes during break times or to reach nearby buildings. Upon completion of the project, sidewalks will be provided along Devlin Road between Green Island Road to South Kelly Road. The proposed project also includes the construction of a multimodal path along Green Island Road, which would be available for use by pedestrians. This is consistent with the various City of American Canyon General Plan policies that promote pedestrian mobility. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

Vehicle Miles Traveled

Impact TRANS-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis

Phases 1 and 2

As discussed earlier, Senate Bill (SB) 743 (2013) directed OPR and the California Natural Resources Agency to establish a change in the metric to be applied for determining traffic impacts associated with development projects. Rather than the delay-based criteria associated with an LOS analysis, the increase in VMT because of a project would be the basis for determining impacts. The City of American Canyon has not yet established thresholds of significance related to VMT. The Napa County travel demand model is not currently available for use as a source for VMT analysis. In lieu of an established local methodology, the project-related VMT impacts were quantitatively assessed based on guidance provided by the OPR in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018.

Based on a review of established policies currently used by the OPR, Sacramento County, and the City of San José, a VMT impact would be identified at an industrial project if the project VMT per employee is higher than the regional average VMT per employee. This focus on employee trips, as opposed to truck traffic associated with the proposed land uses, reflects the focus in CEQA Guidelines Section 15064.3 on VMT associated with automobiles and light trucks. That section states that "[g]enerally, vehicle miles traveled [VMT] is the most appropriate measure of transportation impacts." It further states that VMT "refers to the amount of *automobile travel* and distance of automobile travel attributable to a project." (Italics added.) As of the effective date of section 15064.3, "*automobile delay*, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA]," with exceptions not relevant here (PRC § 21099(b)(2)).

At roughly the same time that section 15064.3 came into effect, OPR also published its "Technical Advisory on Evaluating Transportation Impacts in CEQA." Going beyond the very limited guidance found in section 15064.3, this Technical Advisory provides specific recommendations on how to evaluate transportation impacts under CEQA. The OPR guidance provides detailed suggestions about how public agencies should meet their obligations to address VMT issues in transportation analyses for CEQA documents. The document is currently the best and most authoritative source of information about how to comply with section 15064.3. Notably, the Technical Advisory defines "automobile," as the term is used in section 15064.3, as referring to "on-road passenger vehicles, specifically cars and light trucks." (Technical Advisory, p. 4 [italics added].) Thus, OPR understands the requirement to address VMT as not reaching heavy-duty trucks. The focus on automobiles and not on heavy-duty trucks is consistent with the policy focus behind the elimination of automobile delay as a factor in assessing the significance of transportation-related impacts, as set forth in SB 743. Public Resources Code Section 21099(b)(1) directed the OPR and California Natural Resources Agency to develop alternative significance criteria that would "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." Accounting for heavy-duty trucks engaged in interstate commerce would not contribute to these policy goals, as local and state governments have little or no control over interstate trucking.

For this study, the regional average VMT is defined as the nine county Bay Area average. As reported by the City of Vallejo in their CEQA Transportation Impact Analysis Guidelines (dated October 2020), the Nine County Bay Area Average VMT per employee is 23.00 miles per employee. According to Statewide Travel Demand Model estimates, the proposed project is located within a Traffic Analysis Zone (TAZ) with a projected VMT per employee of 16.24 miles. Because this per capita VMT rate is lower than the significance threshold of 23.0 miles, the proposed project would be considered to have a less than significant VMT impact. It is noted that a more conservative methodology sometimes used by OPR for other employment-based land uses (such as office buildings) states that a project generating a VMT that is 15 percent or more below the regional average VMT, or 19.55 miles, is presumed to have a less than significant VMT impact. If this methodology were applied, the project would be considered to have a less than significant VMT impact since the VMT per employee of 16.24 miles is less than the threshold of 19.55 miles. A summary of the VMT findings is provided in Table 3.12-9.

Table 3.12-9: Vehicle Miles Traveled Summary

VMT Metric	Regional Average/Significance Threshold	Project VMT Rate	Significance
Employment VMT per Capita	23.00	16.24	Less than significant impact

Notes:
VMT = Vehicle Miles Traveled
Source: W-Trans 2021.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Roadway Safety

Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis

Phase 1

W-Trans evaluated site access and sight distance for Phase 1 of the proposed project.

Site Access

Vehicular access to Phase 1 would be provided via four driveways on Green Island Road and four driveways on the future extension of Devlin Road. Access to Phase 2 is anticipated to be provided via numerous full access driveways with connections to the Devlin Road extension. All driveways and internal roadways would be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles. Impacts would be less than significant.

Sight Distance

A substantially clear line of sight should be maintained between the driver of a vehicle waiting at a driveway and the driver of an approaching vehicle. Sight distances along Green Island Road from the project driveways were evaluated based on sight distance criteria contained in the Highway Design Manual published by Caltrans. The recommended sight distance for driveway approaches is based on stopping sight distance using the approach travel speed as the basis for determining the recommended sight distance. Based on the posted speed limit of 40 miles per hour (mph), the

minimum stopping sight distance required is 300 feet; a review in the field shows that sight distances at the project driveway locations on Green Island Road would be adequate, provided any vegetation or buildings are sited to ensure maintenance of adequate sight lines. The sight lines for driveways on the Devlin Road connection are expected to be adequate based on a review of the site plans. Impacts would be less than significant.

Phase 2

Phase 2 would take access from both Green Island Road and Devlin Road. Standard design and engineering practices would dictate that driveways would be aligned with those on the opposite side of both Green Island Road Devlin Road and spaced sufficiently from other driveways and the western Green Island Road railroad grade crossing to avoid conflicting turning movements or the creation of safety hazards. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Emergency Access

Impact TRANS-4: The proposed project would not result in inadequate emergency access.

Impact Analysis

Phase 1

Vehicular access to Phase 1 would be provided via four driveways on Green Island Road and four driveways on the future extension of Devlin Road. Access to Phase 2 is anticipated to be provided via numerous full access driveways with connections to the Devlin Road extension. All driveways and internal roadways would be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles.

Furthermore, construction of the Devlin Road extension began in 2021 and, thus, it is expected to be completed by the time Phase 1 is completed. This would provide a parallel north–south route to SR-29, which would be beneficial from an emergency response perspective. Impacts would be less than significant.

Phase 2

Vehicular access to Phase 2 would be provided by driveways on Green Island Road and Devlin Road. Pursuant to the California Fire Code, a minimum of two points of access would need to be provided to each building. Compliance would ensure that adequate emergency response is provided. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

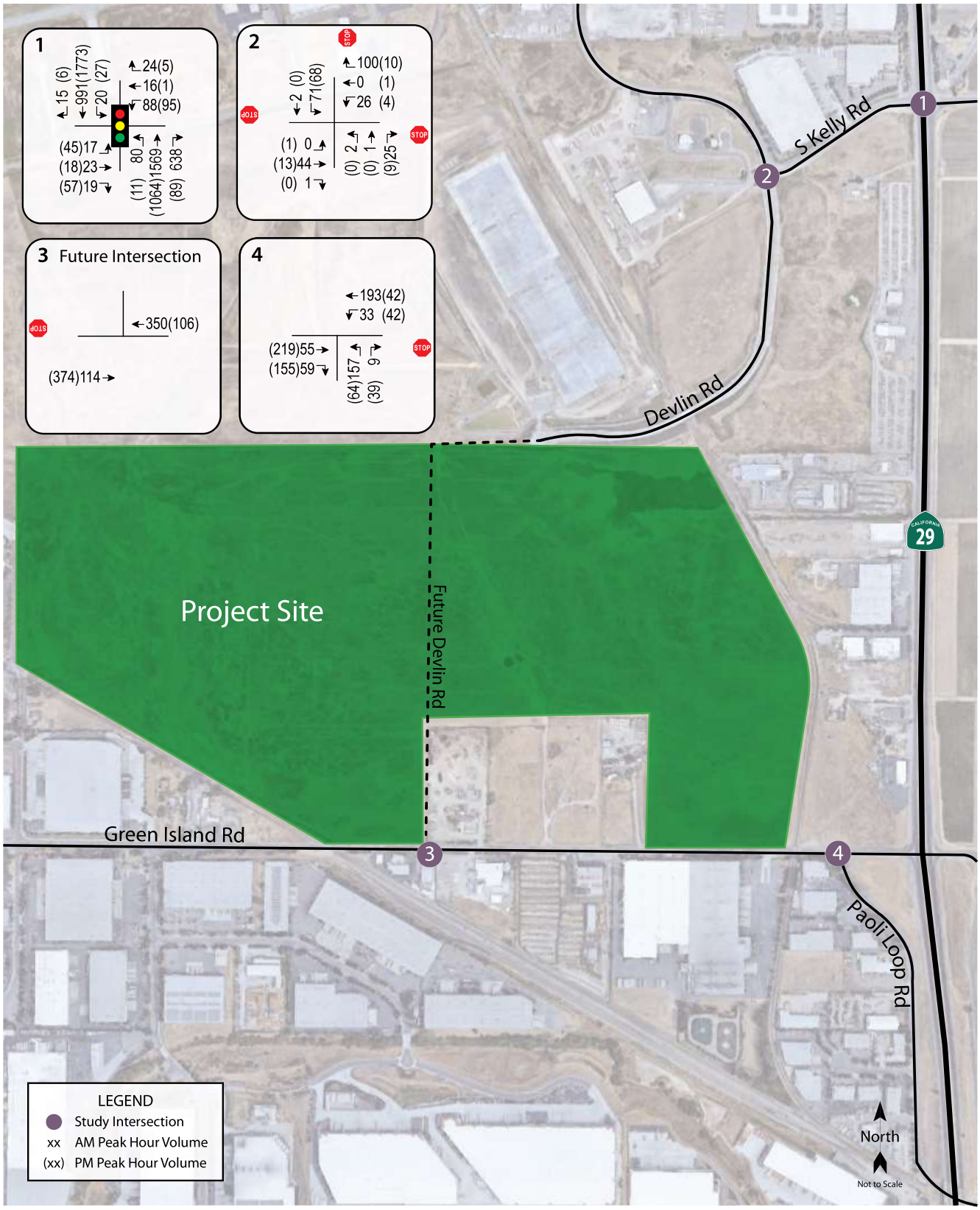


Source: W-Trans, 4/2021.

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Exhibit 3.12-1
Study Area and Lane Configurations

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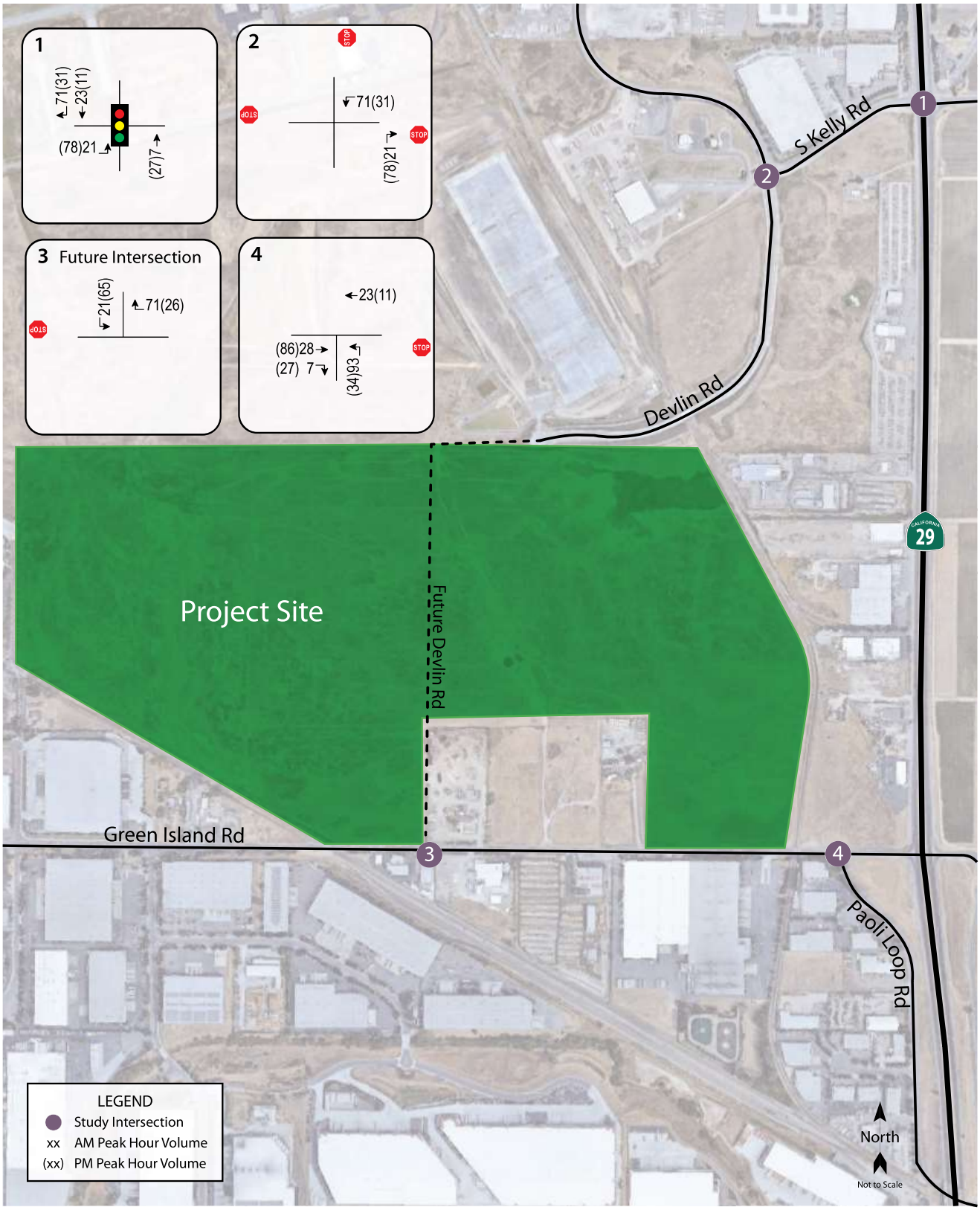


Source: W-Trans, 4/2021.

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Exhibit 3.12-2
Existing Traffic Volumes

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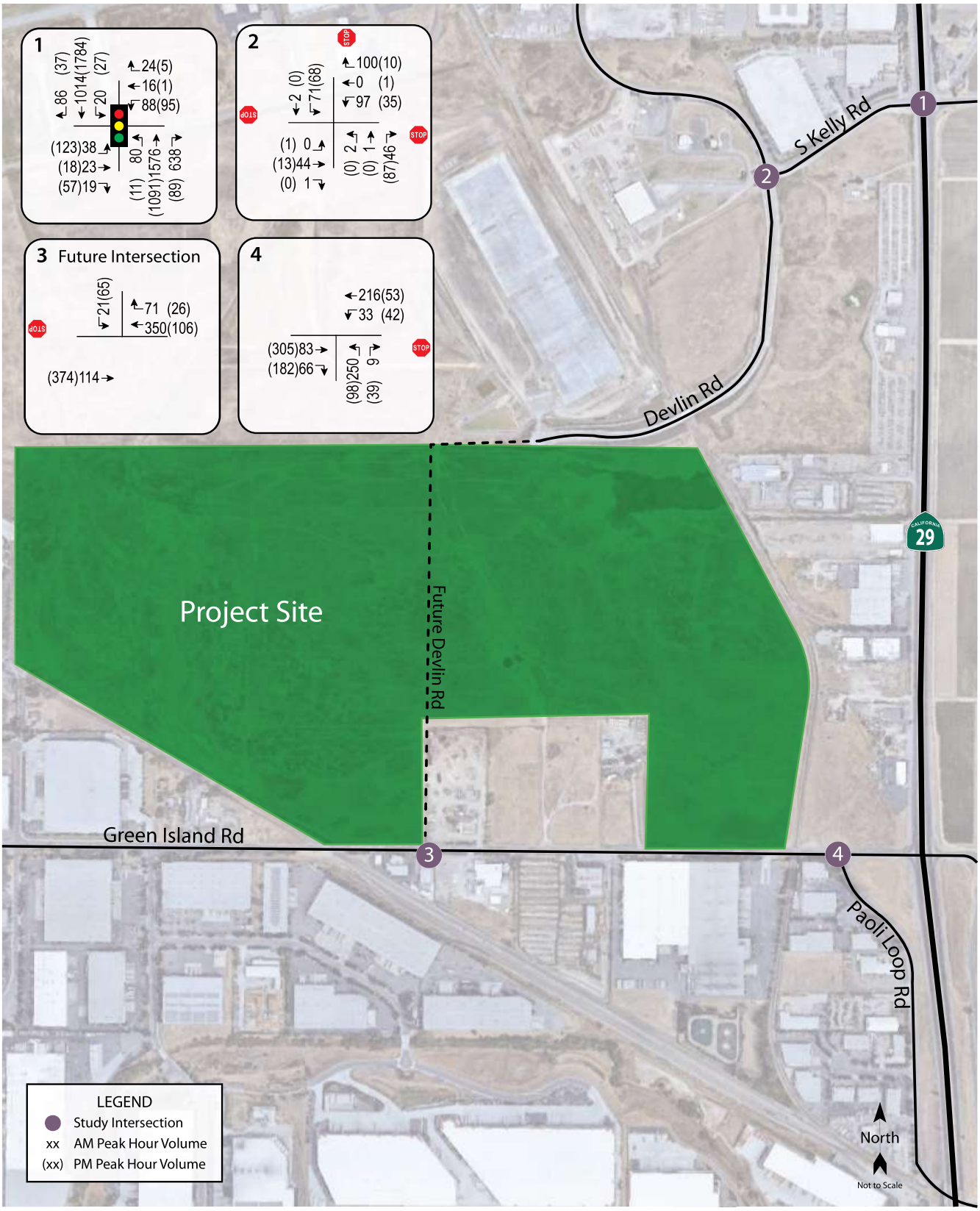


Source: W-Trans, 4/2021.

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Exhibit 3.12-3
Project Traffic Volumes

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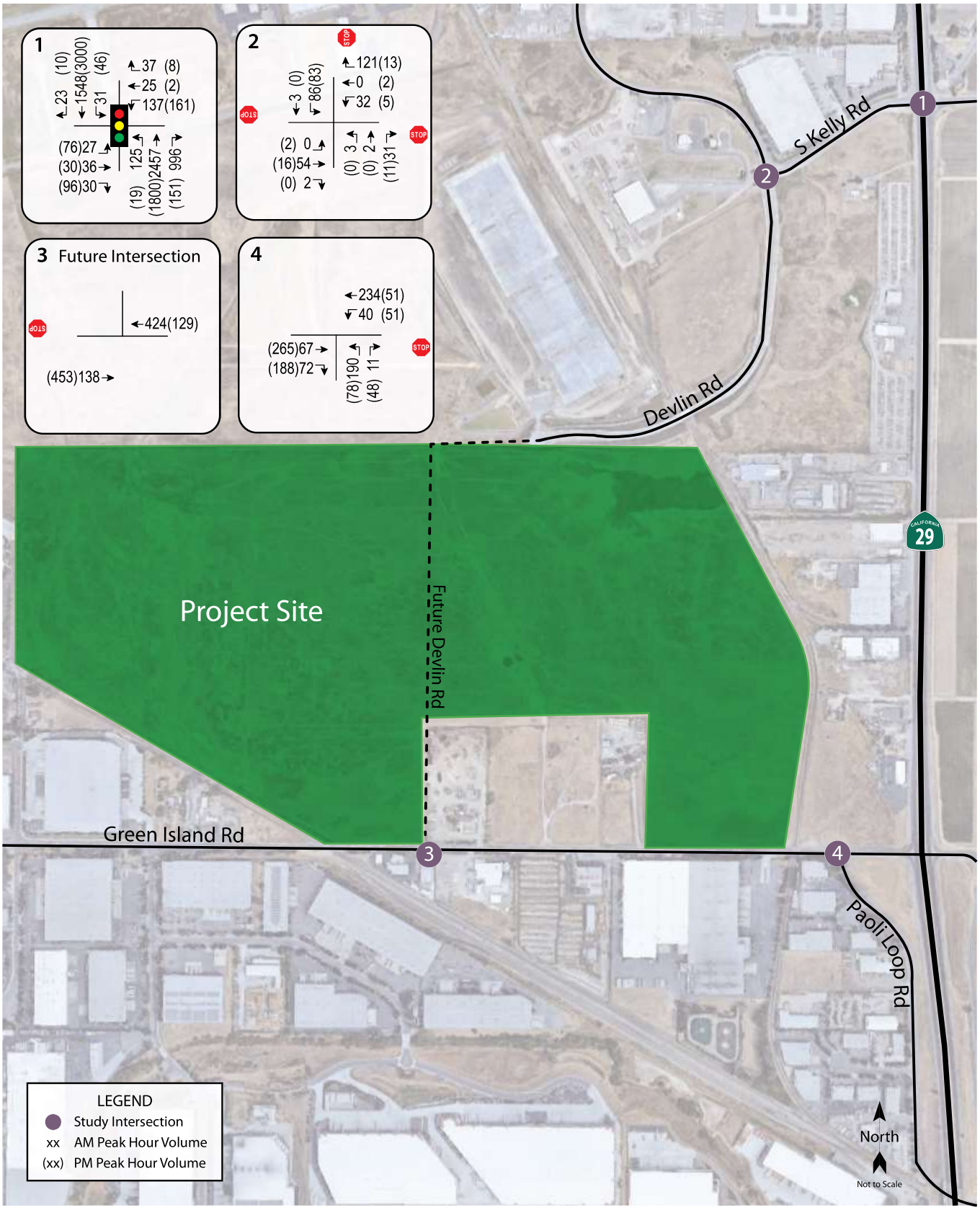


Source: W-Trans, 4/2021.

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Exhibit 3.12-4
Existing Plus Project Traffic Volumes

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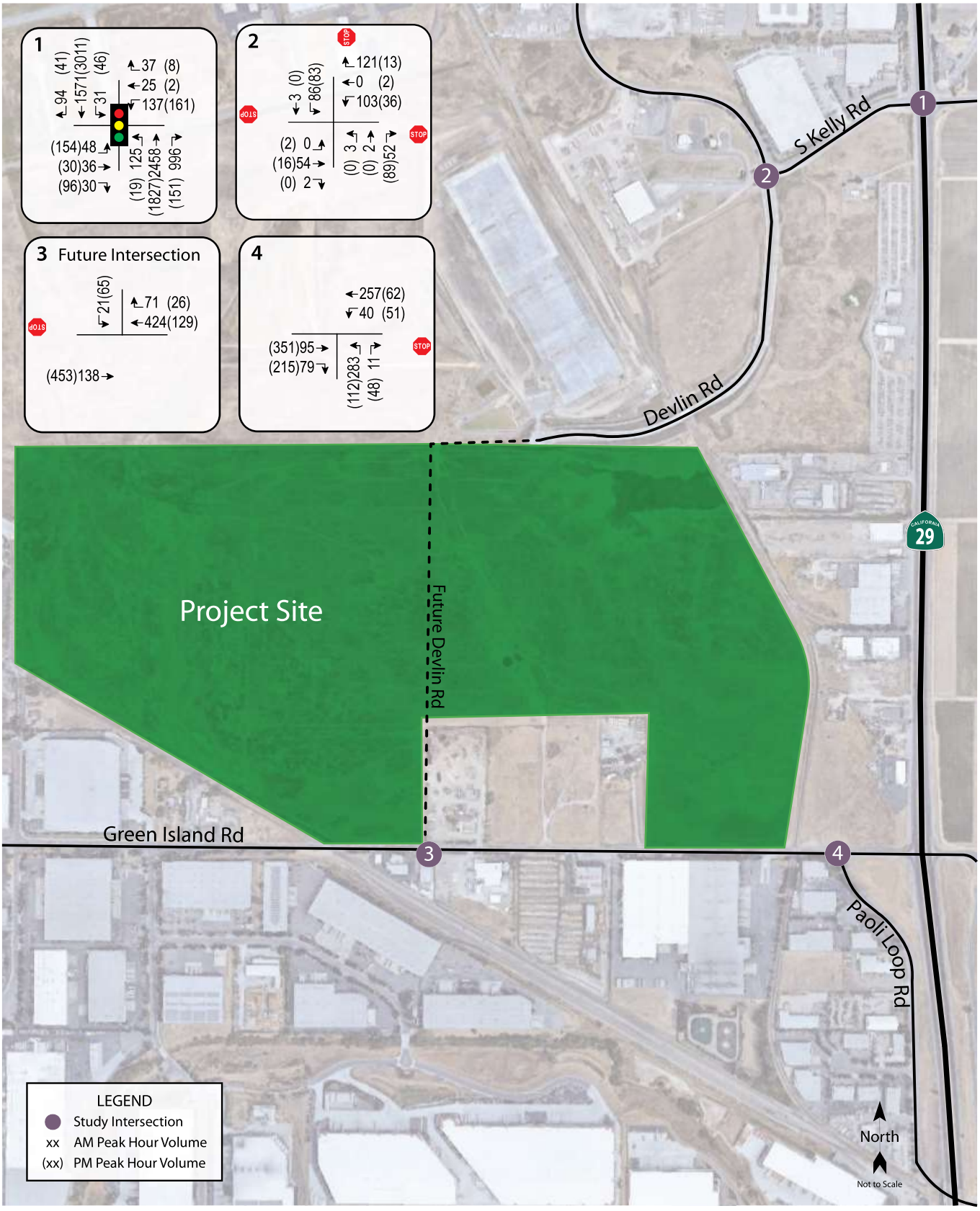


Source: W-Trans, 4/2021.

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Exhibit 3.12-5
Future Traffic Volumes

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Source: W-Trans, 4/2021.

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Exhibit 3.12-6
Future Plus Project Traffic Volumes

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3.13 - Utilities and Service Systems

3.13.1 - Introduction

This section describes the existing public services and utilities and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based on information provided by the City of American Canyon General Plan, the Water Supply Assessment (WSA) prepared by Balance Hydrologics on behalf of the City of American Canyon, and the City of American Canyon Sewer Master Plan. Supporting information is provided in Appendix I.

3.13.2 - Environmental Setting

Water

The City of American Canyon Public Works Department provides potable water and non-potable water to customers within the city limits as well as more than 160 customer accounts located outside the city limits.

Water Supply

American Canyon obtains its water supply from a variety of sources, all of which (except for recycled water) are imported from outside of the City. All of the City's imported water comes through the North Bay Aqueduct system. Table 3.13-1 identifies the City's current sources of water, which are discussed in detail after the table.

Table 3.13-1: Current Sources of Water Supply

Source		Contacted Volume/Capacity (Acre-Feet/Year)
State Water Project (Table A Allotment)[1]		5,200
Vallejo Permit Water[2]		500
Vallejo Treated Water	2011-2015	2,074
	2016-2021	2,640
	2021-Onward	3,206
Vallejo Emergency Water[3]		500
Groundwater[4]		0
American Canyon Recycled Water[5]		1,271
Napa Sanitation District-Produced Recycled Water		591

Notes:
1 Includes allotment for American Canyon and additional supply from Kern County Water Agency
2 Non-Table A Water
3 Available only in dry years
4 No groundwater is used for citywide supply
5 As reported 2015 Urban Water Management Plan (UWMP). Maximum capacity of the City's recycled water treatment system by 2035.
Source: City of American Canyon 2021.

State Water Project

A significant portion of the City's supply is obtained through various indirect contracts for water from the State Water Project (SWP). The Napa Flood Control and Water Conservation District is the State Water Contractor with the California Department of Water Resources (DWR), and the City receives its water through subcontracts with the Napa Flood Control and Water Conservation District.

Table A Allocation

In January 1967, the American Canyon County Water Agency[1] entered into an agreement with the Napa Flood Control and Water Conservation District for water supply from the North Bay Aqueduct. In 2010, the agreement allowed for the delivery of up to 5,200 acre-feet of water per year.[2] This contract runs through 2035 with provisions for extension. The actual amount of SWP water available to the City under the "Table A" allocation process (the method used by the DWR to allocate water in the SWP system) varies from year-to-year due to hydrologic conditions, water demands of other contractors, SWP facility capacity, and environmental/regulatory requirements. Deliveries have varied between 5 percent (in 2014) and 100 percent (last occurring in 2006) of the contracted amount.

City of Vallejo

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to allow the purchase of additional water supply. Vallejo receives its water from a variety of sources, including SWP water and an appropriative water right. Under the Vallejo Agreement, a specific source is identified for Permit Water supply but not for Treated or Emergency Water.

Vallejo Permit Water (Raw)

The City of Vallejo holds an appropriative right for Sacramento Bay-Delta water from the California State Water Resources Control Board (State Water Board) that pre-dates the construction of the SWP. The City of American Canyon has an agreement with the City of Vallejo for delivery of up to 500 acre-feet of water under this permit. This source of water is more reliable than the City's Table A supply, but the Vallejo Agreement still allows for reductions. Addendum 2 to the 1996 Vallejo Agreement states that "In the event the State Water Resources Control Board, or any other agency, restricts Vallejo's diversion of water [under the appropriative pre-SWP contract] for any reason whatsoever, American Canyon's diversions will be reduced in the same proportion." As such, curtailment is typically less than that of the City's Table A supply under environmental or other constraints, but the City may not receive its full allotment during dry years.[3]

Vallejo Treated Water (Potable)

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to purchase up to 629 acre-feet of potable treated water supply. This agreement included the option for additional (cumulative) purchases in 5-year increments through 2021. Ultimately, this results in a total of 3,206 acre-feet of treated water available for purchase each year by the City from Vallejo for 2021-2040.

[1] A predecessor agency to the City of American Canyon, which was not incorporated until 1992.
[2] A total of 500 acre-feet of this water was obtained through a purchase of water, by the Napa Sanitation District, from Kern County Water Agency in 2000.
[3] Vallejo Permit Water delivery was curtailed in both 2014 and 2015, for example.

A specific source for Treated Water is not identified in the Vallejo Agreement; thus, the ultimate source of this water is a blend of all of Vallejo's water sources. Under certain conditions, the maximum delivery of this supply may be "reduced in the same proportions as any reduction to Vallejo customers inside the Vallejo city limits."[4]

Vallejo Emergency Water (Raw)

When the City's Table A water allotment is curtailed, the City of American Canyon has the option to purchase up to 500 acre-feet of emergency raw water supply from Vallejo under an agreement amended in 1996. The 2015 Urban Water Management Program (UWMP) assumes that this water would be available under dry year and multiple dry year scenarios but not during a normal year.

Groundwater

The City of American Canyon does not currently rely on groundwater as a source of water, though the 2015 UWMP states that the City remains open to the possibility and will consider potential supply opportunities as they present themselves.

Other Sources of Potable Supply

Dry Year Water Bank

In 2009, the City of American Canyon (along with other SWP contractors) entered into an agreement with DWR to obtain emergency supplies if rice farmers in the Sacramento Valley are willing to make their supplies available. The year-to-year availability of this supply is not known, and thus supplies are not factored into long-term planning in the 2015 UWMP.

Turn-Back Water Pool Program

DWR has a program for interested SWP contractors called the Turn-back Water Pool Program. SWP contractors may choose to sell Table A water or purchase turn-back pool water that is available through the program. Water from this pool program was not included in the reliability assessment in the 2015 UWMP because the program operates on an as-available basis and long-term availability is not reliable. The amount of pool water available to the City of American Canyon is not a significant amount. For example, during 2010 the City purchased 17 acre-feet, and in 2012 it purchased 64 acre-feet. However, between 2015-2020 the City did not purchase any water from the Turn-back Pool Program.

Napa Treated Water

The City has an agreement with the City of Napa for the purchase of treated (potable) water under emergency conditions, or when the North Bay Aqueduct system is off-line for maintenance or other reasons. This water source is not a water supply and is not included in the reliability assessment in the 2015 UWMP since it is only available during emergencies. Napa treated water, however, does provide operational flexibility (such as providing water to customers even when the City's water treatment plant is off-line for an extended period of time). During 2010, the City purchased 306 acre-feet of treated water when the plant was off-line for maintenance-related issues. Under this informal arrangement, the Napa treated water purchase counts against the City's SWP Table A allotment and is not an additional supply (and is not included in Table 3.13-1).

[4] Vallejo Water Service Agreement. May 1, 1996 (Appendix E.4 in the 2005 American Canyon UWMP).

Dry Year Transfer Program

During dry years, varying amounts of additional water may be made available to SWP contractors through DWR's Dry Year Transfer Program, which allows for transfers through a combination of crop idling, groundwater substitution, and changes in reservoir operation. For example, in 2015 the City of American Canyon purchased 92 acre-feet of additional supply (for that year) through this program. While this option is available to the City on a per year authorization, the long-term reliability of this supply is not known and included only as potential supplementary supply for the analysis in this WSA.

Yuba Accord

In 2008, the DWR adapted the Lower Yuba River Accord, an agreement to settle issues related to in-stream flows in the Yuba River and fisheries habitat. As part of that agreement, the DWR is able to purchase water from the Yuba River Water Agency to, in part, offer to participating SWP contractors as a transfer during dry years. The Napa County Flood Control and Water Conservation District has authorized the execution of Yuba Accord Dry-year Water Purchase Agreement, and the City of American Canyon has the option to purchase water through this agreement in dry years, though at a cost that is considerably higher than under normal conditions. In 2015, the City authorized the purchase of 124 acre-feet through this program to cover projected water supply shortfalls during the drought. While this option is available to the City in drought conditions, the availability and reliability of such water past 2020 is unknown,[5] and therefore has not been included as long-term reliable supply for the analysis in the WSA.

Recycled Water

American Canyon Recycled Water

In 2010, the City of American Canyon completed the first phase of its Recycled Water Distribution System Project, which included a one-million-gallon reservoir, distribution piping, and associated improvements at the City's water treatment plant. Initially, 13 users were connected to the system and 73 acre-feet of water was delivered in 2010. Ultimately, the Recycled Water Master Plan in 2016 projected over 1,200 acre-feet of water demand at buildout in 2035 for landscaping and agricultural irrigation. However, utilization of this supply is dependent on connection of additional users and completion of additional distribution pipe segments. Currently, the City produces recycled water to meet demand on an as needed basis.

The City is currently taking steps to increase capacity of their system to meet this demand in the future. The analysis in the WSA uses 1,271 acre-feet per year (AFY) as the full system capacity by 2035, as reported in the 2015 UWMP.

Napa Sanitation District Recycled Water

In addition to the City's recycled water supply, Napa Sanitation District (NapaSan) has an existing recycled water supply pipe that extends to northern portions of the Airport Industrial Area (north of Fagan Creek). In 2015, NapaSan provided 210 acre-feet of recycled water to the City's users. The 2015 UWMP projected that NapaSan will provide up to 391 acre-feet of recycled water in 2020, up to 491 acre-feet in 2025, and 591 acre-feet in 2030 and onwards.

[5] The original term of the Napa County Flood Control and Water Conservation District agreement was through the end of 2015, but an amendment in 2014 authorized an extension until the end of 2020.

Wastewater

The City of American Canyon provides wastewater collection and treatment to customers in both the city limits and nearby parts of unincorporated Napa County. The wastewater service area is 6.3 square miles and could potentially be 8.5 square miles in the future.

Collection System

The City's wastewater collection system consists of gravity pipelines (53 miles), force mains (5 miles), and five pump stations that convey wastewater to the City's Water Reclamation Facility located near the Napa River. The City's system operates its collection system to segregate domestic water from high strength industrial wastewater flows. The Kimberly Pump Station and the Sunset Meadows Pump Station collect wastewater from residential areas and deliver 75 percent of the flow to the wastewater treatment plant. The Tower Road and Green Island Sewer Pump Stations transport wastewater from industrial areas in the northern part of the City. These two stations discharge a combination of domestic and industrial wastewater to a common force main and deliver the remaining 25 percent of the flow to the Water Reclamation Facility.

Green Island Pump Station

The project site is located within the Green Island Pump Station sewershed. The pump station's sewershed is 2.3 square miles and has a capacity of 600 gallons per minute (gpm). The City's Sewer Master Plan contemplates replacing the pump station with a new facility sized for 1,455 gpm.

Existing Sewer Facilities

An existing 18-inch diameter force main that connects the Tower Road Pump Station with the Green Island Pump Station crosses the western portion of the project site.

Planned Sewer Facilities

The City's Sewer Master Plan contemplates a new 21-inch diameter gravity sewer line that would follow the planned extension of Devlin Road between Middleton Way (Napa Logistics Park) and Green Island Road. From there, the sewer line would continue west to the new Green Island Pump Station. Once operational, the existing 18-inch diameter force main that crosses the project site would be abandoned, along with the Tower Road Pump Station.

Water Reclamation Facility

The American Canyon Water Reclamation Facility is owned and operated by the City of American Canyon. The facility treats both domestic and industrial wastewater flows and is a secondary/tertiary treatment plant. It began operations in 2002 and employs a Membrane Bio Reactor and ultraviolet light disinfection. The treatment plant has an existing design capacity of 2.5 million gallons per day (mgd). The City has plans to expand the Water Reclamation Facility's treatment capacity to 4.0 mgd.

Approximately 17 percent of total influent inflow received at the Water Reclamation Facility becomes recycled water. In 2019, 282 acre-feet of recycled water were delivered to various users for non-potable use. The remaining effluent is treated and discharged to the Napa River.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon city limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharge flows into the Napa River. The City maintains a Storm Drain Master Plan and engineering standards that guide the development of the municipal storm drainage system.

The City requires stormwater discharges to comply with San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) permit requirements and establishes non-point source pollution control measures as required by federal and State law. Stormwater pollution prevention measures for new development projects, such as bioswales, detention ponds, erosion, and sedimentation control, are incorporated in the planning, design, construction, and operation of projects with the potential to create pollutants in stormwater runoff.

Project Site Drainage

The project site does not contain any formal storm drainage facilities. Runoff from the project site either ponds on-site or sheet flows toward No Name Creek in the northern portion of the site.

Solid Waste

American Canyon Recology provides garbage pickup for all residents and businesses pursuant to a franchise waste hauling agreement with the City of American Canyon. Roll-off service is also available.

Devlin Road Transfer Station

American Canyon Recology transports solid waste to the Devlin Road Transfer Station within the Napa County Airport Industrial Area. The Transfer Station is owned by the Napa-Vallejo Waste Management Authority (NVWMA), a joint-powers agency consisting of the cities of American Canyon, Napa, and Vallejo, and the County of Napa. The Transfer Station accepts municipal solid waste and construction and demolition (C&D) debris. The NVWMA has plans to construct an enclosed C&D Debris Recycling Facility on a vacant parcel it owns immediately south of the Devlin Road Transfer Station.

Potrero Hills Landfill

Municipal solid waste and demolition debris from the Devlin Road Transfer Station are landfilled at the Potrero Hills Landfill in Solano County. The Potrero Hills Landfill, located approximately 1 mile south of Suisun City, is a regional facility that serves numerous jurisdictions within a 150-mile radius. In 2005, the County of Solano approved a 260-acre expansion that increased capacity to 83.1 million cubic yards. In 2010, the San Francisco Bay Conservation and Development Commission (BCDC) issued a permit allowing the expansion to proceed. Following the conclusion of litigation, the expansion was cleared to move forward in 2014. Table 3.13-2 summarizes the Potrero Hills Landfill.

Table 3.13-2: Potrero Hills Landfill Summary

Permitted Area	Permitted Daily Throughput	Permitted Disposal Capacity	Remaining Capacity	Permitted Hours of Operation	Permitted Traffic Volume	Estimated Closure Date
525.7 acres (total)	3,400 tons (7-day average)	83.1 million cubic yards	38.8 million cubic yards	Monday-Friday: 24 hours a day	500 inbound daily vehicles (7-day average)	2048
340.0 acres (disposal)	4,330 tons (single day peak)			Saturday-Sunday: 4:00 a.m. to 12:00 a.m.	1,000 inbound daily vehicles (single day peak)	

Note:
Data obtained from Solid Waste Facility Permit No. 48-AA-0075
Source: California Department of Resources Recycling and Recovery (CalRecycle) 2021.

3.13.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

Pursuant to Section 402 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in Suisun City are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, MS4 Order No. 2013-001 (General Permit). In 1987, Congress amended the Clean Water Act to mandate controls on discharges from Municipal Separate Storm Sewer Systems (MS4s). Acting under the federal mandate and the California Water Code, RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, "Post-Construction Stormwater Management Program," mandates municipalities to require specified features and facilities–to control pollutant sources, to control runoff volumes, rates, and durations, and to treat runoff before discharge from the site–be included in development plans of projects that create or replace 5,000 square feet or more impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 requires all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development

approvals to prepare submittals that demonstrate their project complies with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §§ 10610–10656) requires that all urban water suppliers prepare UWMPs and update them every 5 years. In preparing a UWMP, an urban water supplier must describe or identify the following, among other things (as set forth in Water Code § 10631):

- "The service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning."
- "Projected population estimates" based on "data from the State, regional, or local service agency population projections within the service area," in "five-year increments to 20 years or as far as data is available."
- "Past and current water use" and "projected water use."
- "Existing and planned sources of water" for each five-year increment of the 20-year planning period.
- Specific detailed information about groundwater where it is identified as "an existing or planned source of water available to the supplier."
- "All water supply projects and water supply programs" that may be undertaken to meet "total projected water use," including "specific projects" and the "increase in water supply" expected from each project.
- An estimate of "the implementation timeline for each project or program."
- "Plans to supplement or replace" any "water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors" with "alternative sources or water demand management measures, to the extent practicable."
- "The reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable," for (i) an "average water year," (ii) a "single dry water year," and (iii) "[m]ultiple dry water years."

- "Opportunities for exchanges or transfers of water on a short-term or long-term basis."
- "Opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply."
- "Water demand management measures."

Senate Bill 610: Water Supply Assessments

As revised by Senate Bill (SB) 610 (Stats. 2002, ch. 643), Section 10910, *et seq*. of the California Water Code set forth the circumstances in which California Environmental Quality Act (CEQA) lead agencies must seek preparation of, or prepare themselves, "water supply assessments" for defined proposed "projects." At the time a lead agency determines that a proposed project requires an Environmental Impact Report (EIR), the lead agency shall identify any "public water system" that would serve the project site and shall request that any such entity prepare a WSA for the project. In the absence of such a public water system, the city or county lead agency must prepared its own WSA. SB 610 functions together with CEQA, in that a WSA must be included in "any environmental document" for any "project" subject to SB 610 (Water Code Section 10911(b); see also State CEQA Guidelines Section 15155(e); see also *Id*. Section 15361 [defines "environmental documents" to include "Negative Declarations. . . [and] draft and final EIRs"]).

One of the fundamental tasks of a WSA is to determine whether "total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses" (Water Code Section 10910 (c)(3), (c)(4)). In making such a determination, the authors of the WSA must address several factors. Specifically, the WSA must contain information regarding existing water supplies, projected water demand, and dry year supply and demand. In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 433 ("*Vineyard*"), the California Supreme Court briefly summarized the key content requirements as follows:

> With regard to *existing* supply entitlements and rights, a water supply assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction . . . but as to additional *future* supplies needed to serve the project, the assessment need include only the public water system's plans for acquiring the additional supplies, including cost and time estimates and regulatory approvals the system anticipates needing (Water Code §§ 10910, subd. (d)(2), and 10911, subd. (a)). (Original italics.)

"Existing" water supplies can be based on different kinds of legal rights or arrangements, including entitlements, water rights, and water service contracts. In many cases, these supplies are likely already described in detail in the supplier's UWMP (Water Code § 10631(b)). Suppliers are expressly permitted to rely on information contained in the most recently adopted UWMPs, provided that the water needed for proposed development project was accounted for therein (Water Code § 10910(c)(2)).

In preparing a WSA, the public water system must disclose and document the quantity of water received from these various sources. Such supplies must be demonstrated by providing the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(*Id*. subd. (d)(2)).

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. Rather, after identifying a shortfall, the public water system must provide its plans for acquiring "additional supplies" (or what the California Supreme Court called "future" supplies) (Water Code § 10911(a)). These plans should include information concerning the following:

(1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.

(2) All federal, State, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.

(3) Based on the considerations set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city and county . . . expects to be able to acquire additional water supplies.

These particular Water Code requirements for assessments are action-forcing, in that they require the public water system to lay out a roadmap for obtaining new water supplies once it becomes aware that existing supplies are insufficient for the proposed project together with other foreseeable planned growth.

Regardless of the information provided to a city or county in a WSA, SB 610 stops short of preventing cities and counties from approving the "projects" at issue absent "sufficient" water supplies. But where "existing water supply entitlements, water rights, or water service contracts" are "insufficient" to serve proposed projects, SB 610 does require that, in approving projects in the face of insufficient supplies, cities and counties must "include" in their "findings for the project[s]" their "determination[s]" regarding water supply insufficiency. SB 610 functions together with CEQA, in that a water supply assessment must be included in "any environmental document" for any "project" subject to SB 610. (*Id*. subd. (b); Guidelines, § 15155, subd. (e); see also id. § 15361 [defines "environmental documents" to include "Negative Declarations. . . [and] draft and final EIRs"]).

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the State Water Board adopted a Recycled Water Policy in an effort to move toward a sustainable water future. The Recycled Water Policy states "we declare our independence from relying on the vagaries of annual precipitation and move toward sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater."

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least 1 million AFY by 2020 and at least 2 million AFY by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 AFY by 2020 and at least 1 million AFY by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water and indicates the State Water Board will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or subregional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a Constituents of Emerging Concerns Advisory Panel was established to address questions about regulating constituents of concern (COCs) with respect to the use of recycled water. The Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential COC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel". The State Water Board used those recommendations to amend the Recycled Water Policy in 2013 (State Water Board Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for COCs in recycled water. The monitoring requirements pertain to the production and use of recycled water

for groundwater recharge reuse by surface and subsurface application methods, and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based COCs: COCs of toxicological relevance to human health.
- Performance indicator COCs: An individual COC used for evaluating removal through treatment of a family of COCs with similar physicochemical or biodegradable characteristics.
- Surrogates: A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of COC treatment.

Only groundwater recharge reuse facilities would be required to monitor for COCs and surrogates. Surface application and subsurface application facilities would have different mandatory COCs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the Policy including compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Water Conservation Act of 2009

Requirements regarding per capita water use targets are defined in the Water Conservation Act of 2009, which was signed into law in November 2009 as part of a comprehensive water legislation package. Known as SB X7-7, the legislation sets a goal of achieving a 20 percent reduction in urban per capita water use Statewide by 2020. SB X7-7 requires that retail water suppliers define in their 2010 UWMPs the gallons per capita per day targets for 2020, with an interim 2015 target.

Assembly Bill 1881

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission (CEC) to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Assembly Bill 2882

AB 2882 was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive Statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, SB 1016, Wiggins, Statutes of 2008, Chapter 343, introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: (1) a jurisdiction's population (or in some cases employment) and (2) its disposal as reported by disposal facilities.

Assembly Bill 341 (75 Percent Solid Waste Diversion)

In 2011, the Legislature implemented a new approach to the management of solid waste. AB 341 (Chesbro, Chapter 476, Statutes of 2011) required that the California Department of Resources Recycling and Recovery (CalRecycle) oversee mandatory commercial recycling and established a new Statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. This paradigm adds to the policies in AB 939 in several significant ways. First, AB 341 established a Statewide policy goal, rather than a jurisdictional mandate. This places the onus for achieving the goal on the State rather than on the cities and counties that are directly responsible for waste disposal and recycling. Under the law, individual jurisdictions are not required to meet the new policy goal.

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The standards were updated in 2013. The 2013 standards set a goal of reducing growth in electricity use by 561.2 gigawatt-hours per year (GWh/y) and growth in natural gas use by 19 million therms per year. The savings attributable to new nonresidential buildings are 151.2 GWh/y of electricity savings and 3.3 million therms. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC]; and water heating systems), indoor and outdoor lighting, and illuminated signs.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals and policies relevant to public services and utilities:

Goal 5 It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the general plan.

Policy 5.2.5 In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.

Goal 5C Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.

Policy 5.10.3 Require that adequate storm drain and flood control facilities be constructed coincident with new development.

Policy 5.10.12 Require that new development be designed to prevent the diversion of floodwaters onto neighboring parcels.

Policy 5.10.18 Require that development projects maximize the use of pervious surface materials (grass, ground cover, and other) that minimize stormwater runoff.

Goal 5D Maintain the quality of surface and subsurface water resources within the City of American Canyon.

Policy 5.12.2 Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.

Policy 5.13.1 Require that development activities comply with the State General Storm Water Permit for Construction Activities with measures that protect surface water quality to the maximum extent practicable.

Goal 6A Maintain a high level of fire protection and emergency services to City/District businesses and residents.

Goal 6B Ensure a high level of police protection for the City's residents, businesses, and visitors.

Policy 6.7.1 Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.

3.13.4 - Methodology

This section is based on the information provided by a number of sources, which are described below.

Balance Hydrologics prepared a WSA that evaluated water supply impacts in accordance with Water Code Section 10910. The WSA is provided in its entirety in Appendix I.

Additionally, FirstCarbon Solutions (FCS) reviewed relevant City documents, including the City of American Canyon General Plan, the Napa County Airport Industrial Area Specific Plan, the American Canyon Municipal Code, the City of American Canyon Sewer Master Plan, and the City of American Canyon Recycled Water Annual Report 2019. FCS also reviewed document and websites produced by the City of American Canyon and CalRecycle.

3.13.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to utilities and service systems are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect if it would:

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.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

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.

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.

e) Comply with federal, State, and local statutes and regulations related to solid waste.

On the subject of water supply, CEQA Guidelines Section 15155[f], which codifies the California Supreme Court's decision in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, sets forth additional analytical issues that must be addressed on the specific subject of water supply. "The analysis shall include the following:

(1) Sufficient information regarding the project's proposed water demand and proposed water supplies to permit the lead agency to evaluate the pros and cons of supplying the amount of water that the project will need.

(2) An analysis of the reasonably foreseeable environmental impacts of supplying water throughout all phases of the project.

(3) An analysis of circumstances affecting the likelihood of the water's availability, as well as the degree of uncertainty involved. Relevant factors may include but are not limited to, drought, salt- water intrusion, regulatory or contractual curtailments, and other reasonably foreseeable demands on the water supply.

(4) If the lead agency cannot determine that a particular water supply will be available, it shall conduct an analysis of alternative sources, including at least in general terms the environmental consequences of using those alternative sources, or alternatives to the project that could be served with available water."

Each of these issues is addressed in the following analysis.

3.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Water Supply

Impact USS-1:	**The proposed project would not require the City of American Canyon to obtain additional water supplies in order to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**

Impact Analysis

Phases 1 and 2

Potable water demand for the project was estimated by CBG Engineers based on demand factors contained in the 2016 City of American Canyon Potable Water Master plan and is summarized in Table 3.13-3. These estimates were calculated using an average day demand of 0.015 gallons per day/square foot which is the average water use across all the industrial sector and believed to be an overly high estimate of water use for this project. Therefore, revised potable water use projections for the project were calculated using averages from other similar commercial warehouse projects with more in-depth water demand estimates and/or metered water usage.

Table 3.13-3: Estimated Project Water Demand

Project Feature	Building Floor Area (Square Feet)	Acre-Feet Year			
		Potable Water Use	Revised Potable Water	Recycled Water Use	Total Water Use
Phase 1–Building A	601,383	10.1	6.1	20.8	30.9
Phase 1–Building A	468,521	7.9	4.7	16.2	24.1

Project Feature	Building Floor Area (Square Feet)	Acre-Feet Year			
		Potable Water Use	Revised Potable Water	Recycled Water Use	Total Water Use
Phase 2	1,300,000	21.8	13.1	45.0	66.9
Total	**2,369,904**	**39.8**	**23.9**	**82.1**	**121.9**

Notes:
Revised potable water use estimates based on average day demand of 0.009 gpd/sf. This is an average generated from three commercial water demand estimates.
Source: CBG Engineers 2021.

The Napa Airport Corporate Center (NACC) is an industrial warehouse development just north of the project site in the City of American Canyon. Multiple industrial warehouse buildings are planned in this development (Buildings B, D, E, G, and H). Details of the water demand estimates are reported in the NACC WSA report, with an estimated average day demand of 0.006 gpd/square foot. Similarly, the proposed Suisun Logistics Center is a planned industrial warehouse project in Fairfield, California, which is also owned and operated by Buzz Oates. The proposed Suisun Logistic Center used water meter data from similar Buzz Oates developments in Fairfield to project anticipated potable water demand. Using actual water use from four industrial developments, Suisun Logistics Center average day demand is estimated at 0.01 gpd/square foot (Appendix B). In order to provide a more realistic estimate of potable water demand for the proposed Giovannoni Logistics Center Project, the WSA prepared for the proposed project (see Appendix I) averaged various demand rates described above (CBG, NACC, and Suisun Logistics Center), resulting in an average day demand of 0.009 gpd/square foot. This revised average day demand was used to calculate a revised potable water use for the proposed project and is summarized in Table 3.13-3. The WSA estimates the total potable water demand of the proposed project at buildout to be 23.9 AFY (15.9 AFY less than the usage originally estimated by CBG Engineers).

For the purposes of the WSA, all indoor water demand is assumed to be from potable water. The applicant has not indicated that recycled water would be used for non-potable indoor uses, though that would remain an option to further reduce potable water demand at the site, should the applicant choose. Table 3.13-3 shows the estimated potable water demand for each building of the proposed project.

Recycled Water

The proposed project would use recycled water for all irrigation needs. Estimated recycled water use within the project is summarized in Table 3.13-3. The current project plans do not have estimates for the area of irrigated landscaping. The proposed project irrigation water demand was approximated by applying the average ratio of 0.604 between irrigated area and building footprint from the neighboring NACC project, with a demand factor of 2.5 acre-feet/acre (from Table 3.13 in the 2010 UWMP). These irrigation demand estimates may be high if the proposed project plans to landscape with xeric or native plant species that have lower-than-typical irrigation needs.

The recycled water usage estimates in Table 3.13-3 are intended to be used for environmental planning documentation. Actual use per building may vary based on final site plans, but total use is

expected to be consistent with (or less than) these assumptions. As stated above, all non-potable indoor water use is anticipated to be served by potable supply, though the option remains open to serve with recycled water, should the applicant choose.

Project Demand Comparison to Urban Water Management Plan

Potable Water Demand

In order to project future systemwide water demand for the 2015 UWMP, the standard demand factors from the 2010 UWMP were used along with a variety of growth-rate estimates for various land-use sectors. For the commercial/industrial sector, the City analyzed the acreage of vacant land zoned for those uses, and applied a water use factor of 675 gallons/day/acre (gpd/acre) to each parcel. The project's demand has been incorporated into long-term projections under an assumption of a buildout use of 675 gpd/acre (0.76 AFY per acre).

Table 3.13-4 compares the estimated project demand with the assumptions for the parcel included in the 2015 UWMP. Due to relatively low water use of warehouse space compared to industrial sector averages, the incorporation of recycled water for irrigation purposes, and the designation of a portion of the site for wetland preservation that would not require supplemental water supply, the proposed project is expected to use 133.3 AFY less water than expected under the 2015 UWMP growth scenario. Implementation of the City's Zero Water Footprint Policy would result in an additional 23.9-acre-foot reduction in potable water demand relative to the UWMP systemwide demand analysis.

Table 3.13-4: Comparison of Estimated Water Demand to Urban Water Management Plan

	Acre-Feet Year					
	Potable Water				Recycled Water	
Phase	UWMP	Project	Difference	ZWF Offset	UWMP	Project
1	71.6	10.8	(60.9)	(10.8)	–	37.1
2	85.6	13.1	(72.5)	(13.1)	–	45.0
Total	**157.2**	**23.9**	**(133.3)**	**(23.9)**	–	**82.1**

Notes:
UWMP = Urban Water Management Plan
ZWF = zero water footprint
The UWMP did not project irrigation demand on a parcel-by-parcel basis. Because project irrigation would be supplied by recycled water, comparison against projections in the UWMP is not necessary.
Source: Balance Hydrologics 2021.

Recycled Water

The American Canyon UWMP assumes irrigation use to be 2.5 acre-feet of water per acre of landscaping but (unlike for potable demand) did not project recycled water demand associated with particular parcels anticipated for development. Because recycled water use offsets demand for potable (or raw imported) water and it is in the City's best interest to maximize use of recycled

water, the project's recycled water demand is assessed relative to the recycled water demand goals outlined in the UWMP.

The 2016 Recycled Water Master Plan showed a delivery of 248 acre-feet for an existing 21 users between August 2013 and July 2014. In 2019, 282 acre-feet of recycled water was delivered to customers which is still below the projected 391 acre-feet of recycled water in 2020. The proposed project would add an estimated 82.1 AFY of recycled water demand.

Systemwide Demand

Recent Actual System Demand

The 2015 UWMP provides a comprehensive assessment of anticipated future water demand that included projections for both potable and recycled water for 2015-2040. However, actual water usage between 2015 and 2020 differed from what was projected in the UWMP, suggesting that demand patterns for 2015-2040 may be different as well. Table 3.13-5 shows the actual water usage within the City's distribution area since the 2015 UWMP was completed, as well as the interpolated yearly demand based on the projections in the UWMP. Since 2015, potable water demand has been much lower than that anticipated in the UWMP.

Table 3.13-5: Recent Potable and Recycled Water Usage for American Canyon

Category	Acre-Feet Year					
	2015	2016	2017	2018	2019	2020
Total Potable Water Use	2,968	2,572	2,558	2,667	2,418	2,665
Total Project Water Demand (UWMP)	2,976	3,062	3,148	3,233	3,319	3,405
Total City Recycled Water Use	180	–	–	–	282	–
Total Projected Recycled Water Demand (UWMP)	385	509	634	758	883	1,007
Total Water Usage (Actual)	3,148	2,572	2,558	2,667	2,700	2,665
Total Projected Water Demand (UWMP)	3,361	3,571	3,781	3,992	4,202	4,412

Notes: Actual water usage from Napa County Flood Control and Water Conservation District SWP delivery accounting tables (provided by the City) plus agricultural raw water. Agricultural raw water use estimated to remain at 2015 level (56 AFY) through 2020, then be reduced to zero thereafter.
Source: Balance Hydrologics 2021.

Projected System Demand

The 2015 UWMP projected future demand on a parcel-by-parcel basis relative to expected growth under the City's general plan. The analysis assumed that recycled water would be available to meet a portion of the total demand, with the remainder supplied by potable water. Table 3.13-6 shows the water demand as presented in the 2015 UWMP.

Table 3.13-6: Projected Potable, Recycled, and Total Water Demand for American Canyon

UWMP Reported Value	Acre-Feet Year					
	2015	2020	2025	2030	2035	2040
Projected Potable Water Demand	2,345	3,150	3,350	3,606	3,862	4,131
Projected Potable System Losses	631	255	272	292	313	335
Recycled Water Demand	385	1,007	1,146	1,351	1,862	1,862
Total Water Demand	**3,361**	**4,412**	**4,768**	**5,249**	**6,037**	**6,328**
Source: Balance Hydrologics 2021.						

Unbilled Water Losses

The UWMP assumed that unbilled water losses would be 7.5 percent for each year between 2020-2040. This is consistent with standards adopted by the California Urban Water Conservation Council, which provides that systems that experience greater than 10 percent losses annually undergo a water audit. In 2015, water delivery and water use records indicate that system losses were 22 percent. The City is currently undertaking an aggressive response to the situation by replacing leaky services and water mains to reduce system loss. The City assumed it would reduce system losses to 7.5 percent of the total potable and raw water deliveries by 2020. In 2015, the City replaced more than 120 segments of residential services lines as part of its program to reduce distribution system losses.

Supply and Demand Comparison

The following analysis compares future citywide water demand to anticipated available supply under "normal year," "single dry year," and "multiple dry year" scenarios. The scenarios presented herein have been summarized from the 2015 UWMP analysis for citywide system planning.

This analysis addresses potable and recycled water separately, as recycled water supply is considered reliable (and available at 100 percent of capacity) under all year-types. Reliability of potable water varies by year-type as a percentage of contracted amount, as shown in Table 3.13-7.

Table 3.13-7: Supply Reliability for Various American Canyon Water Sources

Source	2021-2040 Contracted or Available Volume	Year Type				
		Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3
State Water Project (Table A allotment)	5,200	62%	5%	22%	22%	22%
Vallejo Permit Water[1]	500	100%	100%	100%	100%	100%
Vallejo Treated Water[1]	Varies[2]	100%	80%	80%	80%	80%
Vallejo Emergency Water[1]	500	0%	100%	100%	100%	80%
Groundwater[3]	n/a	–	–	–	–	–

	2021-2040	Year Type				
Source	Contracted or Available Volume	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3
American Canyon Recycled Water	n/a [4]	100%	100%	100%	100%	100%

Notes:
UWMP = Urban Water Management Plan
[1] Percentages from 2015 UWMP, Table 7-4, 7-5, 7-6.
[2] Contracted Amount is 2,074 in 2015; 2,640 in 2020; and 3,206 2021-onward.
[3] Groundwater is not a source for citywide supply.
[4] Recycled water is produced to meet demand, ultimately, maximum production capacity of City's recycled water system is expected to be 1,000 acre-feet per year (AFY).

Potable Water

Table 3.13-8 summarizes available potable water supply under 'normal year,' 'single dry year,' and 'multiple dry year' scenarios. The City's potable water supply relies exclusively on imported water, both from the SWP and through the City of Vallejo. A percentage of the full contracted amount is assumed for each source type under each scenario. These percentages are based on guidance by DWR, analysis in the City's UWMP and the Vallejo UWMP. Resulting supply volumes for each source under the various scenarios through 2040 are shown in Table 3.13-8. The supply and demand for potable water for each of the year-types is discussed as follows.

Table 3.13-8: Projected Water Supply for American Canyon for Various Year Types

Source	2021-2040	2015	2020					2025					2030					2035					2040				
	Contracted or Available Volume	Actual	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3	Normal Year	Single Dry Year	Dry Year 1	Dry Year 2	Dry Year 3
State Water Project Table A allotment	5,200	1,953	3,224	260	1,144	1,144	1,144	3,224	260	1,144	1,144	1,144	3,224	260	1,144	1,144	1,144	3,224	260	1,144	1,144	1,144	3,224	260	1,144	1,144	1,144
State Water Project (Article 21)	Varies	72	189	0	124	124	124	189	0	124	124	124	189	0	124	124	124	189	0	124	124	124	189	0	124	124	124
Vallejo Permit Water	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Vallejo Treated Water	Varies	102	2,640	2,112	2,112	2,112	2,112	3,206	2,565	2,565	2,565	2,565	3,206	2,565	2,565	2,565	2,565	3,206	2,565	2,565	2,565	2,565	3,206	2,565	2,565	2,565	2,565
Vallejo Emergency Water	500	387	0	500	500	500	400	0	500	500	500	400	0	500	500	500	400	0	500	500	500	400	0	500	500	500	400
Total Potable	6,200	3,014	6,553	3,372	4,380	4,380	4,280	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733
American Canyon Recycled Water	n/a[2]	180	616	616	616	616	616	655	655	655	655	655	760	760	760	760	760	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271
NapaSan Recycled Water	Varies[3]	210	391	391	391	391	391	491	491	491	491	491	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591
Total Recycled	–	390	1,007	1,007	1,007	1,007	1,007	1,146	1,146	1,146	1,146	1,146	1,351	1,351	1,351	1,351	1,351	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862
Total Supply	–	3404	7,560	4,379	5,387	5,387	5,287	8,265	4,971	5,979	5,979	5,879	8,470	5,176	6,184	6,184	6,084	8,981	5,687	6,695	6,695	6,595	8,981	5,687	6,695	6,695	6,595

Notes:
1. Contracted amount is 2,074 in 2015, 2,640 in 2020, and 3,206 2021-onward.
2. Recycled water is produced to meet demand; ultimately, maximum production capacity of City's recycled water system is expected to be 1,000 acre-feet per year (AFY).
3. Projected deliveries from NapaSan to the northern Airport Industrial Area. Does not include demand for the Montalcino Resort, as that amount will not affect citywide demand.

Table 3.13-9: Comparison of Potable and Recycled Water Supply and Demand Under Various Year-type Scenarios

	2015	2020					2025					2030					2035					2040				
Source	Actual (AFY)	Normal Year (AFY)	Single Dry Year (AFY)	Dry Year 1 (AFY)	Dry Year 2 (AFY)	Dry Year 3 (AFY)	Normal Year (AFY)	Single Dry Year (AFY)	Dry Year 1 (AFY)	Dry Year 2 (AFY)	Dry Year 3 (AFY)	Normal Year (AFY)	Single Dry Year (AFY)	Dry Year 1 (AFY)	Dry Year 2 (AFY)	Dry Year 3 (AFY)	Normal Year (AFY)	Single Dry Year (AFY)	Dry Year 1 (AFY)	Dry Year 2 (AFY)	Dry Year 3 (AFY)	Normal Year (AFY)	Single Dry Year (AFY)	Dry Year 1 (AFY)	Dry Year 2 (AFY)	Dry Year 3 (AFY)
Total potable supply[1]	3,014	6,556	3,372	4,380	4,380	4,280	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733	7,119	3,825	4,833	4,833	4,733
Potable demand[2]	2,345	3,405	3,405	3,405	3,405	3,405	3,622	3,622	3,622	3,622	3,622	3,898	3,898	3,898	3,898	3,898	4,175	4,175	4,175	4,175	4,175	4,466	4,466	4,466	4,466	4,466
Potable supply minus demand	669	3,148	-33	975	975	875	3,497	203	1,211	1,211	1,111	3,221	-73	935	935	835	2,944	-350	658	658	558	2,653	-641	367	367	267
Recycled water supply[3]	390	1,007	1,007	1,007	1,007	1,007	1,146	1,146	1,146	1,146	1,146	1,351	1,351	1,351	1,351	1,351	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862
Recycled water demand[4]	385	1,007	1,007	1,007	1,007	1,007	1,146	1,146	1,146	1,146	1,146	1,351	1,351	1,351	1,351	1,351	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862
Recycled supply minus demand	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:
AFY = acre-feet per year
1. From Table 7.
2. Projected potable normal year demand, from Table 5.
3. From Table 7.
4. From Table 5

Normal Year

In a "normal year," the City's 2015 UWMP assumes "Table A" SWP deliveries would be 62 percent of the total contracted amount. Treated water from Vallejo water and raw Vallejo Permit Water are assumed to be 100 percent available in normal years, consistent with the 2015 UWMP.

The UWMP concluded that future supply is available to meet anticipated demand in normal years through buildout in 2035, as does the analysis in the WSA (Table 8). Excess supply in normal years ranges from a low of 2,653 in 2040 to a high of 3,497 AFY in 2025.

Single Dry Year

Under the "single dry year" scenario, the 2015 UWMP assumed SWP Table A deliveries to be curtailed to 5 percent of the contracted amount (see Table 3.13-8 and Table 3.13-9).

All water from Vallejo is considered a more reliable source than the City's SWP supply. The 2015 UWMP assumes that raw Vallejo Permit Water is available at 100 percent and Treated Vallejo Water is available at 80 percent of the contracted amount during single dry years. In addition, the full allotment of raw Vallejo Emergency Water (500 acre-feet) would be available under dry year conditions. The analysis herein uses these same assumptions.

The 2015 UWMP shows that single dry year supply is not significantly currently constrained and the City will be able to reliably meet potable demand until the year 2030. Single dry year deficiencies are anticipated starting in 2035 (Table 3.13-9). The City has several options available to resolve dry-year supply deficiencies.

Multiple Dry Years

The multiple dry year scenario, as described in the UWMP, consists of three consecutive years of reduced water deliveries, though none are reduced to the same degree as the single dry year scenario. The UWMP assumed that SWP Table A water would be reduced to 22 percent of the contracted amount for each of the three years.

Raw Permit Water is assumed to be available at 100 percent, and Treated Water from Vallejo is assumed to be available at 80 percent of the contracted amount for years 1, 2, and 3 of the multi-year drought following the assumptions in the 2015 UWMP. Vallejo Emergency Water is assumed to be available at the full contracted amount (500 acre-feet) for each of the 3 years of a multi-year drought, consistent with the 2015 UWMP.

The 2015 UWMP projects that water supply will exceed demand during a 3-year drought through the full 2040 planning period.

Potable Water Deficiency Resolution

The prior analysis compares potable water supply and normal year demand, and projects supply shortages in several of the "dry year" and "multiple dry year" planning scenarios. This section describes a series of options available to the City to eliminate those shortfalls in order to provide reliable supply. Estimated SWP carryover water would be sufficient to eliminate dry year supply shortfalls and could also be used in combination with drought demand reductions to further improve supply reliability.

State Water Project Carryover Water

If the City does not use its entire allotment of Table A water in a given year, the remaining water will carry over to the following year, assuming there is adequate storage in SWP reservoirs to contain the excess supply.[6] Between 2015 and 2020, the City has stored between 35 and 2,600 acre-feet of carryover water in a given year (Table 3.13-10), which has helped to meet demand during recent dry years. Because of the variability of carryover supply and the periodic "re-set" of the accounting when reservoirs are full, it is not considered a consistent yearly supply for planning purposes, but it does allow the City extra flexibility during droughts. As such, the carryover water has been incorporated into the analysis in the WSA.

Table 3.13-10: Recent State Water Project Carryover Water Supply

	2015	2016	2017	2018	2019	2020	Mean
Table A deliveries (percentage of total contract amount)[1]	25%	75%	100%	50%	85%	20%	59%
Available carryover water (remaining from previous year, in AFY)[1]	876	1,087	127	2,210	35	2,600	1,156

Notes:
AFY = acre-feet per year
[1] From Napa County Flood Control and Water Conservation District SWP delivery accounting tables (provided by the City).

It is assumed that 1,156 acre-feet of carryover water, the average over the last six years, would be available at the beginning of a dry year and the first year of a multi-year drought. Projected excess normal year supply ranges from 2,653 to 3,497 acre-feet for 2020-2040, suggesting that the 1,156 acre-feet is a reasonable and somewhat conservative estimate for planning purposes.[7] In the second and third year of a multi-year drought, the remaining carryover supply (presuming there is any) would continue to carry over to subsequent years to supplement supplies.

For example, in the single dry year scenario for 2035, 1,156 acre-feet would be available to meet the supply deficit of 350 acre-feet. The difference (806 acre-feet) would be available if there was another drought year. Under the above assumptions, the City would be able to meet projected supply deficiencies under all dry and multiple dry year scenarios within the planning period (2015-2040) through the use of available carry-overwater.

Advanced Table A Program

A recent court settlement (Area of Origin Settlement 18, 2014), clarifies another potential mechanism for the Napa County Flood Control and Water Conservation District, the Solano County Water Agency, and Yuba City (along with subcontractors to those agencies, which includes American Canyon) to obtain water during dry periods. The Advanced Table A Program allows these agencies to borrow against future SWP deliveries during times when annual deliveries are not sufficient to meet

[6] In years when SWP reservoirs spill, the carryover water is released, effectively re-setting carryover accounting to zero. Typically, however, ample storage is available in dry years.
[7] By definition, a single dry year would follow a normal or wet year, as would the first year of a 3-year drought

demand. The agreement requires that all Table A and Table A carryover water be used prior to utilizing the Advanced Table A Program, but under those circumstances the City could request an advance of up to 949 acre-feet from future years' Table A allotments.

The projections in Table 3.13-11 do not rely on the use of the Advanced Table A Program water to meet dry year demand, as estimated Table A carryover is enough to cover supply deficiencies for all scenarios. However, this program provides an important tool available to the City should unforeseen circumstances result in significantly lower-than-expected carryover.

Table 3.13-11: Potable Water Deficiency Resolution for Dry- and Multi-dry Year Scenarios

Source	2015 Actual (AFY)	2020 Normal Year (AFY)	2020 Single Dry Year (AFY)	2020 Dry Year 1 (AFY)	2020 Dry Year 2 (AFY)	2020 Dry Year 3 (AFY)	2025 Normal Year (AFY)	2025 Single Dry Year (AFY)	2025 Dry Year 1 (AFY)	2025 Dry Year 2 (AFY)	2025 Dry Year 3 (AFY)	2030 Normal Year (AFY)	2030 Single Dry Year (AFY)	2030 Dry Year 1 (AFY)	2030 Dry Year 2 (AFY)	2030 Dry Year 3 (AFY)	2035 Normal Year (AFY)	2035 Single Dry Year (AFY)	2035 Dry Year 1 (AFY)	2035 Dry Year 2 (AFY)	2035 Dry Year 3 (AFY)	2040 Normal Year (AFY)	2040 Single Dry Year (AFY)	2040 Dry Year 1 (AFY)	2040 Dry Year 2 (AFY)	2040 Dry Year 3 (AFY)
Potable supply minus demand[1]	669	3,403	222	1,230	1,230	1,130	3,769	475	1,483	1,483	1,383	3,513	219	1,227	1,227	1,127	3,257	-37	971	971	871	2,988	-306	702	702	602
Estimated Table A carryover water[2]	–	–	1,156	1,156	2,386	3,616	–	1,156	1,156	2,639	4,122	–	1,156	1,156	2,383	3,610	–	1,156	1,156	2,127	3,098	–	1,156	1,156	1,858	2,560
"Advanced Table A" water[3]	–	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0
Demand savings through drought restrictions[4]	–	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	0	0	0	0	0
Open market water purchases[5]	–	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	–	0	0	0	0	0	0	0	0	0
Adjusted supply minus demand[6]	**669**	**3,403**	**1,378**	**2,386**	**3,616**	**4,746**	**3,769**	**1,631**	**2,639**	**4,122**	**5,505**	**3,513**	**1,375**	**2,383**	**3,610**	**4,737**	**3,257**	**1,119**	**2,127**	**3,098**	**3,969**	**2,988**	**850**	**1,858**	**2,560**	**3,162**

Notes:
AFY = acre-feet per year
[1] From Table 3.13-9.
[2] Table A water not used in the prior year may be used in the following year, assuming storage is available; estimated from previous six years of carryover availability. Assume 1,156 acre-feet available in a dry year and the first year of a multi-year drought. Remaining carryover after the first year of a drought is available in the second year, and remaining water after the second year is available in the third year of a drought.
[3] When the City exhausts its supply of carryover water, the City can "borrow" against future State Water Project (SWP) deliveries, up to 949 acre-feet. Projected water shortages can be met solely through carryover supply, so no Advanced water is projected to be needed to meet demand.
[4] The City may choose to offset supply deficiency through demand reduction (drought restrictions) during dry periods. All supply deficiencies are projected to be satisfied through carryover water; restrictions are not likely to be required, but remain an option for the City, if needed; see Table 3.13-12 for projected estimated volume for drought conservation savings.
[5] The City also has the option to purchase additional water on the open market. While not required to meet long-term supply deficiencies the City may choose to use this option during droughts,
[6] Supply minus demand from above, plus additional supply available through carryover, "Advanced Table A," demand savings, and open market purchases

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Drought Year Demand Reductions

It is important to note that the demand projections in the 2015 UWMP (as well as for the analysis in the WSA) were not explicitly adjusted for voluntary or mandatory water use reduction measures that may be implemented in response to drought conditions. The City has a Water Shortage Contingency Plan that outlines four stages of water demand reduction measures that could be utilized when water supply is constrained due to environmental or other conditions. The City projects demand reductions of 10/20/30/50 percent corresponding to each of the tiers, beginning with voluntary actions at Tier 1 and moving to increasingly restrictive mandatory measures for Tiers 2-4.

On June 1, 2021, in response to ongoing Statewide drought conditions, the City declared a Stage 1 drought emergency that called for a voluntary reduction from residential and commercial customers compared to the previous year. On July 20, 2021, the City declared a Stage 2 drought emergency, enacting mandatory water use restrictions, requiring all water customers to reduce their water use by 20 percent. As of the end of August 2021, water conservation measures have resulted in an 18 percent decrease from residential customers and 13 percent decrease from commercial customers.

Because estimated carryover water was sufficient to satisfy projected shortages, the supply and demand analysis in Table 3.13-11 does not account for drought year demand reduction. However, the City may choose to use these measures to provide additional flexibility during droughts. Assuming drought reductions of 13 percent, similar to what was achieved in 2014, the City could be expected to reduce demand in future years ranging between 305 acre-feet in 2015 and 537 acre-feet in 2040 (Table 3.13-12). While these volumes would not solely eliminate projected dry year shortages, these measures could be used in conjunction with the above measures to provide additional buffer, as needed, if other supplies are unexpectedly curtailed. Stronger restrictions (level 3 or 4), could be used to achieve greater reductions if necessary, but are not likely to be needed.

Table 3.13-12: Projected Drought Year Demand Savings

	2015 (AFY)	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)
Projected normal year potable demand[1]	2,345	3,150	3,350	3,606	3,862	4,131
Estimated drought conservation volume[2]	305	410	436	469	502	537

Notes:
AFY = acre-feet per year
[1] From Table 3.13-6.
[2] 13 percent of potable demand.

Open Market Purchases

The City has the option to purchase additional water from a variety of other sources on an as-needed and as-available basis. These potential purchases were not considered as a reliable long-term supply for the purposes of the WSA, though the City could choose to purchase additional supply in dry years when normal supplies are constrained. In fact, the City chose to utilize this option in 2015, and purchased 216 acre-feet of additional supply through the Dry Year Transfer and Yuba Accord Programs. As with the above options, Open Market Purchases can provide additional operational flexibility for the City during dry periods when other supplies are reduced.

Recycled Water

The City's recycled water system has a supply capacity of up to 1,271 AFY by 2035, and NapaSan has agreed to provide up to 591 acre-feet to supply the northern portion of the Airport Industrial Area (which is located within the City's water service area). Practically, however, the City produces recycled water to meet demand, as shown in Table 8 (above). Because recycled water is derived from wastewater that is: (1) less susceptible to fluctuation due to climatic conditions, and (2) available in excess of the capacity of the recycled water system, recycled water is assumed to be 100 percent available during single- and multi-year-drought scenarios. Table 3.13-9 presents recycled water supply versus demand for the 2015-2040 planning period under various year-type scenarios. Because recycled water use offsets water that would otherwise be delivered from limited potable or imported water supply, it is in the City's best interest to maximize recycled water use by way of increasing the number of recycled water users tied into the system.

The projections for recycled water use in the 2015 UWMP were, in effect, operational goals to maximize recycled water use. The UWMP projected 1,862 acre-feet of recycled water use by 2035. Recent recycled water use has been much lower than projected in the UWMP. For example, in 2019 water demand was projected to be about 883 acre-feet, but the City only used 282 acre-feet of recycled water. The City expects a significant expansion in the recycled water delivery system by 2035, allowing full use of the system by that time. Recycled water demand by sector is shown in Table 3.13-13.

Table 3.13-13: Summary of Potential Recycled Water Demand by Sector

Utility land-use classification	Potable offset demand[1] (AFY)	Buildout demand[2] (AFY)
Single-family Residential	–	22.8
Multi-family Residential	–	41.8
Commercial	3.4	49.7
Industrial	4.7	209.9
Institutional/Governmental	101.9	127.4
Landscape	69.4	119.5
Open Space	–	–
Watson Ranch	–	253.2
Recreation	–	204.3
Agricultural	68.1	173.2
Total	24.7	1,201.9

Notes:
AFY = acre-feet per year
[1] Projected demand used in WSA analysis (Table 3.13-7) are lower than the numbers shown here in order to provide a conservative estimate for future demand.
[2] Buildout demand for Institutional/Governmental assumes the American Canyon High School will halve existing demand by fixing suspected leaks in irrigation system.

Conclusion

In summary, the analysis in the WSA shows that the City's water supply is sufficient to meet projected demand, in all years and under all normal-, dry-, and multi-dry-year scenarios. The analysis shows that demand will exceed supply during some dry years, but the City will still be able to meet demand through the use of carryover SWP water or through some combination of carryover SWP water, Advanced Table A Water, demand reductions, and/or additional purchases on the open market. In addition, recycled water supply in the City is available to meet existing and projected demand and available in sufficient volume to support non-potable uses at the project site. Use of recycled water at the site will increase the City's utilization of this supply. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

Wastewater

Impact USS-2:	**The proposed project would not create a need for new or expanded wastewater collection or treatment facilities.**

Impact Analysis

Phases 1 and 2

The proposed project would be served by City of American Canyon for wastewater collection and treatment. Table 3.13-14 estimated the proposed project's wastewater generation using rates provided by the City's Sewer Master Plan. The proposed project would generate 402,500 gallons of effluent per day (0.41 mgd) at buildout.

Table 3.13-14: Wastewater Generation Estimate

Developed Area	Wastewater Generation Rate	Daily Wastewater Generation
161 acres	2,500 gallons/day/acre	402,500 gallons (0.41) mgd)

Notes:
mgd = million gallons per day
Sources: GHD 2016; FirstCarbon Solutions (FCS) 2021.

Phase 1 of the proposed project would generate 276,800 gallons per day (0.28 mgd) and Phase 2 would generate 125,700 gallons (0.13 mgd). Wastewater effluent generation would increase incrementally as each building comes online; there would not be a sudden influx of 0.41 mgd into the City's sewer system.

The proposed project would connect to both an existing 12-inch diameter sewer line within Green Island Road and a future sewer line within the Devlin Road extension. Both lines convey effluent to the Green Island Road Sanitary Pump Station and ultimately the City's Water Reclamation Facility.

The Water Reclamation Facility has an existing design capacity of 2.5 mgd. In the 2008 Interim Facilities Plan for the Water Recycling Plant, a phased improvement plan is outlined to increase the plant capacity over time to 4.0 mgd. The proposed project's wastewater generation of 0.41 mgd would represent 16 percent of the existing treatment capacity and 10 percent of the future capacity. The Water Reclamation Facility would treat effluent and either reclaim it for beneficial use or discharge it to the Napa River. As such, existing and planned treatment capacity would be sufficient to serve the proposed project. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Storm Drainage

Impact USS-3:	**The proposed project would not result in a need for new or expanded off-site storm drainage facilities.**

Impact Analysis

Phases 1 and 2

The proposed project would result in the development of 2.4 million square feet of high-cube warehouse uses on 161 acres of the project site. The remaining 44.8 acres would be preserved as open space. Thus, the proposed project would increase the amount of impervious surface coverage on the project site and would create the potential for increased runoff leaving the project site that may create potential flooding conditions in downstream waterways.

The proposed project would provide 110,766 square feet (2.6 acres) of storm drainage retention on-site. A network of underground piping ranging from 12- to 48-inches in diameter would convey runoff to bioretention and detention basins in the northern portion of the property.

In accordance with applicable provisions of Section C.3 of the San Francisco Bay RWQCB Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008) (or more recent permit) as required under Mitigation Measure (MM) HYD-1b, the proposed project would implement LID stormwater management methods into the on-site storm drainage system consisting of rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment.

Collectively, these measures would serve to slow, reduce, and meter the volume of runoff leaving the project site and ensure that downstream storm drainage facilities are not inundated with

project-related stormwater such that new or expanded facilities would be required. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Solid Waste

Impact USS-4: The proposed project's solid waste would not create a need for additional landfill capacity.

Impact Analysis

Phases 1 and 2

This impact discussion assesses whether the proposed project would be served by a landfill with adequate capacity or comply with federal, State, and local statutes and regulations related to solid waste. Solid waste would be generated by construction and operational activities. Each is discussed as follows.

Construction Waste

The proposed project would result in the construction of 2.4 million square feet of commercial and industrial uses. Using a nonresidential construction waste generation rate published by the United States Environmental Protection Agency (EPA), an estimate of the total construction debris generated by the proposed project is provided in Table 3.13-15.

Table 3.13-15: Construction Solid Waste Generation

Waste Generation Rate	Square Feet	Construction Waste Generation	
		Tons	Cubic Yards
3.89 pounds/square foot	2.4 million	4,668	6,536

Notes:
1 ton = 2,000 pounds; 1 ton = 1.4 cubic yards
Source: United States Environmental Protection Agency (EPA) 1998; FirstCarbon Solutions (FCS) 2021.

Development of the proposed project would generate an estimated 6,536 cubic yards of construction debris. This waste volume represents less than 0.01 percent of the 38.8 million cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table do not adjust construction solid waste generation to account for C&D debris recycling that would serve

to divert waste from the landfill. The Napa Valley Waste Management Authority provides C&D debris recycling at the nearby Devlin Road Transfer Station.

Therefore, short-term construction impacts on landfill capacity would be less than significant.

Operational Waste

Table 3.13-16 summarizes the proposed project's operational waste generation based on rates provided by Cal Recycle.

Table 3.13-16: Operational Solid Waste Generation

Waste Generation Rate	Square Feet	Operational Waste Generation	
		Tons	Cubic Yards
4.8 pounds/square foot	2.4 million	5,760	8,064

Notes:
1 ton = 2,000 pounds; 1 ton = 1.4 cubic yards
Source: California Department of Resources Recycling and Recovery (CalRecycle); FirstCarbon Solutions (FCS) 2021.

The proposed project would generate an estimated 8,064 cubic yards of operational solid waste on an annual basis at buildout. This waste volume represents less than 0.01 percent of the 38.8 million cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table do not adjust operational solid waste generation to account for recycling and waste reduction activities that would serve to divert waste from the landfill. Therefore, long-term operational impacts on landfill capacity would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

CHAPTER 4: CUMULATIVE EFFECTS

4.1 - Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15130 requires the consideration of cumulative impacts within an Environmental Impact Report (EIR) when a project's incremental effects are cumulatively considerable. According to CEQA ". . . the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines § 15065[a][3]). In identifying projects that may contribute to cumulative impacts, CEQA allows the use of a list of past, present, and reasonably anticipated future projects that have the potential to result in related or cumulative impacts, including those outside of the control of the lead agency.

In accordance with CEQA Guidelines Section 15130(b), ". . . the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact.

In general, the cumulative study area for each particular environmental topic is defined based on what is reasonable given the environmental resource under analysis. For example, some environmental resource topics are naturally broad in their impact while others are localized. Cumulative air quality effects, for instance, considers the cumulative effect on the entire Air Basin, whereas cumulative geological hazard impacts generally define the cumulative study area as the project site and potentially projects in the immediate vicinity that may combine to result in a cumulative geological hazard impact. With these qualifications, the list of related past, present, and probable future set forth in Table 4-1 below (Cumulative Projects) extends to the entire City of American Canyon, though some resources require a larger cumulative study area and some a smaller area.

Table 4-1: Cumulative Projects

Jurisdiction	Project	Location	Characteristics	Status
City of American Canyon	Pacific Gas and Electric Company Napa Regional Center	500 Boone Road	100,668-square-foot maintenance and operations center on 24.5 acres	Pending
	Devlin Road Segment H	Project Site	3,084-lineal-foot extension of Devlin Road between Green Island Road to Boone Road; Includes Napa Valley Vine Trail	Under construction

Jurisdiction	Project	Location	Characteristics	Status
	Green Island Road Widening	Green Island Road between State Route (SR) 29 and a cul-de-sac	Reconstruction of roadway; Addition of a two-way left-turn lane, curb, gutter, sidewalks; Construction of the Napa Valley Vine Trail	Approved; Not constructed
	Napa-Vallejo Waste Management Authority Construction and Demolition Debris Recycling Facility	South Kelly Road/Devlin Road (southwest quadrant)	Enclosed construction and demolition debris recycling facility on 9 acres	Approved; Not constructed
	Napa Airport Corporate Center	South Kelly Road/Devlin Road (southeast quadrant)	300,000-square-foot business park on 35 acres	Approved; Not constructed
	Commerce Court Distribution Centers	Commerce Court	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Pending
	Sentinels of Freedom Property	West of Napa Logistics; South of Napa County Airport	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Pending
	Watson Ranch Specific Plan	East of Napa Junction	1,253 dwelling units; 50 live/work units; 93,500-square-feet commercial; 100-room hotel; 600-student school	Under construction
	Broadway District Specific Plan	SR-29 corridor from the southern city limit to Green Island Road	1,200 dwelling units; 840,000 square feet of nonresidential uses within 300 acres	Under Construction
Source: City of American Canyon 2021.				

4.2 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project together with other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.

- An EIR may determine that a project's contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on these principles as the basis for determining the significance of the proposed project's cumulative contribution to various impacts.

4.2.1 - Aesthetics, Light, and Glare

The geographic scope of the cumulative aesthetics, light, and glare analysis is the 0.25-mile radius surrounding the project site. This is the area within view of the project site and, therefore, the area most likely to experience cumulative changes in visual character or experience cumulative light and glare impacts.

Several of the projects listed in Table 4-1 are immediately adjacent to or within 0.25 mile of the project site (e.g., Napa Logistics Park, Napa Airport Corporate Center, Devlin Road Transfer Station Construction and Demolition Debris Recycling Facility, the Devlin Road Extension, etc.).

The project site and the surrounding area have long been planned to accommodate large industrial and warehouse uses and are isolated and separate from the residential areas of the City. The existing surrounding uses are large industrial uses. The City of American Canyon General Plan designates the project site as "Industrial," and the American Canyon Zoning Ordinance zones the project site as "General Industrial." Both land use designations permit the types of end uses envisioned by the proposed project and other existing, approved, and reasonably foreseeable future developments.

Although the development of the proposed project would fundamentally change the visual character of the project site, it would be compatible with surrounding industrial uses and would be consistent with the City of American Canyon General Plan land use designation for the project site. Because the proposed project would preserve 48 acres of the project site that contain No Name Creek and associated wetlands, this area would continue to provide a visual buffer between the industrial uses and the undeveloped marsh area near the Napa River. The project site would feature attractive landscaping consisting of trees, shrubs, and groundcover. Landscaping would be installed along internal roadways, around the buildings, and in the parking areas and would be approved and installed at the time of construction of each building. Design Permits would be required from the City to approve the specific building and site design on each lot, including building height. Furthermore, due to its location, it would not degrade any views of a scenic vista such as the Napa River or Sulphur Springs Hills. Other past projects, present projects under construction, and reasonably foreseeable projects in the surrounding area would be subject to similar landscaping and design requirements. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not result in cumulatively significant aesthetic impacts.

The past, present, and reasonably foreseeable developments near the project site have contributed to—and would continue to contribute to—ambient light and glare in the project vicinity. The proposed project would install new sources of light and glare on the project site from exterior building lighting, security lighting, and lights and glare associated with vehicles accessing the project

site. Mitigation Measure (MM) AES-3 requires new exterior lighting fixtures to employ full cut-off fixtures to direct light downward and eliminate spillage. Other past, present, and reasonably foreseeable future developments in the project vicinity that involve the installation of new exterior lighting fixtures have been and would be required to implement similar standard measures to prevent light spillage. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects in the applicable geographic area, would not have a cumulatively significant impact related to light and glare.

4.2.2 - Air Quality

The geographic scope of the cumulative air quality analysis is the San Francisco Bay Area Air Basin, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions. The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines cumulative significance criteria are used in the cumulative analysis of air quality.

The Air Basin is currently designated as nonattainment for the State and federal ozone and $PM_{2.5}$ standards and the PM_{10} State standards. While an air quality plan exists for ozone, none currently exists for particulate matter. A project would be judged to conflict with or obstruct implementation of the regional air quality plan if it would result in substantial new regional emissions not foreseen in the air quality planning process. Regional emissions forecasts in the air quality plan are based on population and employment forecasts based on City and County General Plans. The proposed project is consistent with land use designations and applicable goals and policies of the American Canyon General Plan, site zoning, and other applicable land use regulatory documents. As such, the proposed project would be considered planned growth. The proposed project would not result in a substantial unplanned increase in population, employment, or regional growth or in Vehicle Miles Traveled (VMT) and would not conflict with or obstruct implementation of the air quality plan in this regard.

Additionally, the proposed project would meet all of the applicable Land Use Measures and Energy and Climate Measures contained in the BAAQMD's Clean Air Plan. For example, the proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any air quality plan control measures.

In developing thresholds of significance for air pollutants, BAAQMD established numerical thresholds for determining when a project's individual contributions would be cumulatively considerable. If a project does not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less than significant air quality impacts to the region's existing air quality conditions. The proposed project would emit operational criteria pollutant emissions (reactive organic gases and oxides of nitrogen) at levels that would exceed the BAAQMD CEQA Guidelines and significance thresholds. Mitigation is proposed requiring the implementation of criteria pollutant emissions reduction measures; however, mitigation would not reduce these

emissions to below BAAQMD thresholds. Because the proposed project cannot reduce criteria pollutant emissions to below BAAQMD regional thresholds with mitigation, the proposed project would contribute to a cumulatively considerable (i.e., significant and unavoidable) regional air quality impact with regard to consistency with the BAAQMD's current Clean Air Plan.

With implementation of fugitive dust control measures, the proposed project would not result in any localized construction fugitive dust impacts. The proposed project was not found to result in any CO hotspots or project-level health risk impacts to sensitive receptors or to create objectionable odors affecting a substantial number of people. Therefore, the proposed project would not contribute to any potential significant cumulative significant impact related to localized criteria pollutant impacts from fugitive dust, CO, or objectionable odors.

As noted above, the proposed project would emit operational criteria pollutant emissions (reactive organic gases and oxides of nitrogen) at levels that would exceed the BAAQMD 2010 CEQA Guidelines and significance thresholds. Therefore, the proposed project would contribute to a cumulatively significant and unavoidable regional air quality impact in regard to criteria pollutants.

As noted above, BAAQMD's established numerical thresholds for individual projects are set at levels determined to represent cumulatively considerable emissions. Since the proposed project's health risk impacts and $PM_{2.5}$ concentration at sensitive receptors are below these levels under the BAAQMD criteria, the proposed project would not result in a cumulatively considerable contribution to any potentially significant cumulative impact. Nonetheless, because of emissions from existing nearby projects, this EIR concludes that a significant cumulative impact would occur.

4.2.3 - Biological Resources

The geographic scope of the cumulative biological resources analysis is a 0.5-mile radius of the project site. The project site is located at the transition between urban development and the marshes associated with the Napa River; accordingly, habitats in these areas tend to be disrupted and impacts would be localized.

The proposed project has the potential to impact special-status plant species and several special-status bird species, including Swainson's hawk, golden eagle, northern harrier, and burrowing owl. However, through the implementation of MM BIO-1a through MM BIO-2e, impacts to these species as a result of the development of the proposed project would be reduced to less than significant levels by requiring pre-construction surveys for these species and establishing buffer zones around any active nests. Although there would be loss of foraging habitat, the cumulative loss of this resource would not be considerable due to the abundance of habitat in the American Canyon area. These mitigation measures would be consistent with other mitigation measure implemented for other projects within the local vicinity of the proposed project including the Devlin Road project and the Green Island Road Reconstruction and Widening project. With the implementation of these mitigation measures any potentially significant cumulative impacts by the probable future projects in Table 4-1, together with the proposed project, would be reduced to less than significant levels.

The proposed project would impact approximately 0.496-acres of palustrine emergent wetlands. Plans for wetland mitigation, including the preservation of an approximately 44.8-acre Wetland

Preserve, to include existing wetlands as well as established/created wetlands, are intended to offset wetland impacts of buildout development of the project site. No Name Creek is contained within the approximately 44.8-acre Wetland Preserve; no impacts to the palustrine emergent wetland swale associated with No Name Creek would occur from the proposed project in the area east of Devlin Road. No impacts would occur to areas that would be subject to California Department of Fish and Wildlife (CDFW) jurisdiction under Fish and Game Code Section 1602, therefore the development of the proposed project would not result in greater cumulative impacts to sensitive natural communities or riparian habitats.

The development of Phase 1 of the proposed project would impact 0.496 acres of palustrine emergent wetlands considered waters of the State under the Porter-Cologne Water Quality Control Act as well as 0.004 acres of palustrine emergent wetlands considered waters of the United States. As described in MM BIO-1a, these impacts would require that the applicant apply for and obtain a Nationwide Permit from the United States Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB) for discharge within 0.004 acres of wetlands. The applicant would also need to apply for and obtain a separate Waiver of Waste Discharge from the San Francisco Bay RWQCB for impacts to 0.496 acres of WOS.

The development of Phase 2 of the proposed project would impact approximately 3.7 acres of wetlands considered both waters of the United States and State. These impacts would require that the applicant submit a separate application for an Individual Permit from USACE to include a plan to compensate for wetland losses as well as a detailed alternatives analysis under the Section 404(b)(1) guidelines to include a detailed evaluation of both on-site and off-site alternatives for the proposed project. Similar to Phase 1, these impacts would also require a Clean Water Act Section 401 Water Quality Certification and a Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB, as described in MM BIO-1b.

As described in MM BIO-1c, to compensate the loss of these wetlands an approximately 44.8-acre Wetland Preserve fronting the northern boundary of the project site would preserve 7.71 acres of existing wetlands and create approximately 4.7 acres of new wetlands within the Wetland Preserve. The creation of this Wetland Preserve and new wetlands would help offset any significant cumulative impacts to jurisdictional wetlands by the proposed project or other projects listed in Table 4-1 and reduce them to less than significant levels overall.

The wildlife corridor along No Name Creek would remain unaffected by the development of the proposed project and would be entirety contained and incorporated into the Wetland Preserve. Therefore, the proposed project would not result in substantial change in animal populations at the site, nor would it cause a fish or wildlife population to drop below self-sustaining levels. Additionally, the requirement for the implementation of a Stormwater Pollution Prevention Plan (SWPPP) would assure that water quality of nearby waterways is not affected by on-site construction activities. This mitigation measure would be consistent with other mitigation measure implemented for other projects listed in Table 4-1, including the Devlin Road project and the Green Island Road Reconstruction and Widening project. As a result, the proposed project would not result in greater cumulative impacts to potential wildlife corridors.

The development of the proposed project does have the potential to impact nesting birds if construction includes the removal of vegetation occurs during the breeding season (February 1 to August 31). However, the implementation of MM BIO-4a would avoid direct and indirect impacts to nesting birds by requiring pre-construction nesting bird surveys and establishing buffer zones around any active nests. This mitigation measures would be consistent with other mitigation measure implemented for other projects listed in Table 4-1, including the Devlin Road project and the Green Island Road Reconstruction and Widening project. With the implementation of MM BIO-4a, any cumulative impacts by the proposed project would be reduced to less than significant levels.

4.2.4 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is a 0.5-mile radius of the project site. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site (including the off-site construction areas), the area near the project site would be the area most affected by project activities (generally within a 500-foot radius).

No listed historic resources are within the project boundaries. Thus, none would be adversely impacted by project construction, therefore no cumulative impacts would occur within the City of American Canyon or its immediate vicinity. Archaeological resource impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). Given that the proposed project would not have a known, direct impact on any known archaeological resources, cumulative project impacts are less than significant. Construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These cumulative projects listed in Table 4-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing cultural resources.

Additionally, the implementation of standard construction mitigation measures would ensure undiscovered cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the project vicinity. Given the standard archaeological resources mitigation measures that would apply to the cumulative projects listed in Table 4-1 (including the proposed project), the cumulative impact related to archaeological resources would be less than significant with mitigation (MM CUL-2a, 2b, and 3)

Although there is the possibility that previously undiscovered tribal cultural resources (TCRs) could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures (MM CUL-4) would ensure that undiscovered TCRs are not adversely affected by cumulative project-related construction activities. Given the low potential for disruption, the standard conditions of approval, and mitigation measures that cumulative projects would be required to implement, the proposed project, in conjunction with

other planned and approved projects, would result in a less than significant with mitigation cumulative impact related to TCRs.

With the implementation of MM CUL-2a, MM CUL-2b, MM CUL-3, and MM CUL-4, the proposed project would not result in a significant cumulative impact to cultural resources in the City of American Canyon or surrounding area.

4.2.5 - Geology, Soils, and Seismicity

The geographic scope of the cumulative geology, soils, and seismicity analysis is the project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be site specific, because each project site has its own geologic and soils conditions, and each project has its own design characteristics, localized within the area near the project site most affected by project activities (generally within a 0. 5-mile radius).

Past, present, and future development projects in the project vicinity have the potential to exacerbate exposure to seismic hazards. The West Napa Fault bisects the project site and, thus, the project site may be susceptible to fault rupture during a seismic event. MM GEO-1a requires the project applicant to retain a qualified geotechnical consultant to prepare a fault investigation study and ensure project plans comply with all required setback requirements. Additionally, the project site may be subject to strong ground shaking during an earthquake; thus, MM GEO-1b requires the project applicant to retain a qualified geotechnical consultant to prepare a design-level geotechnical study and implement all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects have been and may exacerbate exposure to similar potential seismic hazards and would be required to comply with the relevant State and local laws designed to mitigate seismic hazards and mitigation measures imposed under CEQA. Therefore, the proposed project in conjunction with other cumulative development would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death in the event of a major earthquake; fault rupture; ground shaking; seismic-related ground failure; landslide; or liquefaction.

Regarding soil erosion, development activities could lead to increased erosion rates on-site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. MM HYD-1a requires implementation of standard stormwater pollution prevention measures to ensure earthwork activities do not result in substantial erosion off-site. This mitigation, in turn, would have to comply with the National Pollution Discharge Elimination System (NPDES) stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program, which governs projects statewide (and nationwide), requires the preparation and implementation of Stormwater Pollution Prevention Programs for construction activities that disturb more than 1 acre and the implementation of Best Management Practices (BMPs) that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. The proposed project would be required to comply with these regulations, as have and would other nearby past, present, and reasonably foreseeable development projects. Therefore, the proposed project in conjunction with other nearby cumulative development would not have a cumulatively significant impact associated with erosion.

The project site contains native soils that have shrink-swell characteristics, which may exacerbate exposure of project structures to expansive soil hazards. MM GEO-1b requires the project applicant to retain a qualified geotechnical consultant to prepare a design-level geotechnical study and incorporate all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects could be exposed to expansive soil hazards and, therefore, have been and would be required to implement similar mitigation measures based on State and local regulations and CEQA requirements. As such, the proposed project, in conjunction with other nearby past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact associated with expansive soils.

Paleontological resources resource impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). Given that the proposed project would not have a known, direct impact on any known paleontological resources, cumulative project impacts are less than significant. Construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered paleontological resources. These cumulative projects listed in Table 4-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing paleontological resources.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to geology, soils, and seismicity.

4.2.6 - Greenhouse Gas Emissions

The geographic scope of the cumulative greenhouse gas (GHG) emissions analysis is the San Francisco Bay Area Air Basin, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. In a larger sense, however, the relevant geographic area is the entire Earth, as explained by the California Supreme Court. "[B]ecause of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219.) "'With respect to climate change, an individual project's emissions would most likely not have any appreciable impact on the global problem by themselves, but they would contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the proposed project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.'" (*Id.*, quoting Crockett, Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World (July 2011) Golden Gate U. Envtl. L.J. 203, 207–208).)

The proposed project would emit new GHG emissions, as would other past, present, and reasonably foreseeable projects within the Air Basin. The BAAQMD has not set a numerical threshold of significance for GHG emissions from construction. The BAAQMD has a numerical threshold of

significance for GHG emissions from operation as well as a threshold on a per-service population basis. Although the proposed project would comply with relevant elements of the City of American Canyon Energy Efficiency Climate Action Plan (EECAP), such as exceeding the Title 24 standards for new construction, it exceeds both of the BAAQMD operational GHG thresholds and as such could be considered cumulatively significant. As the proposed project also includes a potential new stationary source, GHG emissions from the stationary source were compared to the BAAQMD significance threshold for GHG from stationary sources. The proposed stationary source emissions exceed the relevant BAAQMD significance threshold and as such could be considered cumulatively significant. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable future development in the Air Basin and around the world, would result in a significant cumulative GHG emissions impact. The proposed project's contribution would be cumulatively considerable and thus significant in and of itself.

4.2.7 - Hazards and Hazardous Materials

For most topics the geographic scope of the cumulative hazards and hazardous materials analysis is the project area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. For the transport of hazardous materials, the geographic scope includes local and regional transportation facilities.

The proposed project would not result in any significant impacts associated with hazardous materials because there is no evidence of contamination from past uses, and any use or storage of hazardous materials during construction or operations would be subject to compliance with regulatory requirements and mitigation measures. Accordingly, all project-related impacts associated with hazardous materials were found be less than significant. As with the proposed project, other past, present, and reasonably foreseeable projects have been and would continue to be required to comply with applicable federal, State, and local regulatory requirements regarding the transport of hazardous materials, clean up of hazardous materials, and the use and storage of hazardous materials during construction and operation. Additionally, hazardous material impacts tend to be localized to individual project sites. Consequently, no significant cumulative impacts would occur.

The proposed project would create a wetland preserve in the northern portion of the project site. Mitigation is proposed requiring the implementation of a wildlife management plan to minimize the avian attractant potential of the Wetlands Preserve to avoid creating hazards to aviation. Other past, present, and reasonably foreseeable projects would not create a wildlife attractant hazard for the Napa County Airport, because required compliance with the Napa County Airport Land Use Compatibility Plan and Federal Aviation Administration (FAA) regulations would ensure inappropriate land uses do not locate near the airport. Additionally, stormwater and landscaping features of the proposed project and other land uses would include management plans to avoid or reduce the potential for wildlife hazards. Consequently, no significant cumulative impacts would occur. Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to hazards and hazardous materials.

4.2.8 - Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the No Name Creek watershed, which generally encompasses the area within 0.5 mile of the project site. Hydrologic and water quality impacts tend to be localized to a watershed; therefore, the area within the No Name Creek watershed would be most affected by project activities.

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. These activities are subject to regulatory requirements that would ensure no significant adverse impacts would occur. MM HYD-1a and MM HYD-1b would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. These measures include preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit and compliance with the Municipal Regional Permit, including implementation of BMPs and Low Impact Development (LID) features.

Other past, present, and reasonably foreseeable projects that propose new development have been and would be required to implement similar mitigation measures in accordance with applicable laws and regulations. The combined implementation of construction and operation water quality control measures by other past, present, and reasonably foreseeable projects would avoid, or reduce to a less than significant level, any related cumulative impacts on downstream waterways including the Napa River.

All other project-related hydrology impacts were found to be less than significant and did not require mitigation (e.g., groundwater and drainage). Other past, present, and reasonably foreseeable projects that result in groundwater and drainage impacts have been and would be required to comply with applicable laws and regulations designed to protect groundwater resources and ensure adequate drainage facilities are provided for all projects and include facilities to prevent and reduce runoff from development sites.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to hydrology and water quality.

4.2.9 - Land Use

The geographic scope of the cumulative land use analysis is the area within 1 mile of the project site. Existing development in this area is predominantly industrial uses, including the airport. Projects under construction include the Napa Logistics Park Project, which is approved for warehouse and other similar uses. Foreseeable future development in the area includes the Napa Airport Corporate Center and the Devlin Road Transfer Station Construction and Demolition Debris Facility.

The proposed project would be consistent with the American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan because its proposed uses are allowed under these plans. The existing uses in the area are generally industrial

and related compatible uses. Projects under consideration in the area and reasonably foreseeable future projects would be required to be consistent with the General Plan, the City's Zoning Ordinance, and the Airport Land Use Compatibility Plan. Additionally, the proposed project and other nearby development would be and have been required to implement wildlife management plans to ensure compatibility with airport operations. Consequently, the proposed project, in conjunction with past, present, and reasonably foreseeable development, would not result in a cumulatively significant land use impact.

4.2.10 - Noise

The geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area near the project site (approximately 0.25 mile) would be the area most affected by project activities. Furthermore, given the properties and the distance between other past, present, and reasonably foreseeable development projects (more than 0.5 mile away), project-related noise would not combine with other sources further away.

The proposed project's construction noise levels may cause a temporary substantial increase in noise levels at nearby receptors. Mitigation is proposed that would require implementation of construction noise attenuation measures to reduce noise levels. Other projects in the project vicinity that could be under construction at the same time as the proposed project (such as Napa Logistics Park Phase 1 and Napa Corporate Center) could combine to expose nearby sensitive receptors to excessive construction noise from trucks and equipment. However, because noise is a localized phenomenon, the properties of noise are not additive, construction activities on these projects may not overlap, and all projects would be subject to the City's noise ordinance requirements and mitigation measures, the proposed project, together with other past, present, and probable future projects, would not result in cumulatively significant construction noise impacts.

The proposed project's construction and operational vibration levels would not exceed annoyance thresholds. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the proposed project to combine with vibration from other projects because of their distances from the project site. Therefore, the proposed project, together with other past, present, and probable future projects, would not result in cumulatively significant vibration impacts.

As discussed in Section 3.9, Noise, after mitigation, the proposed project's vehicular trips would not make a substantial incremental contribution to ambient noise levels under baseline-with-project and future-with-project conditions. These noise levels account for existing vehicle trips as well as vehicle trips from future projects. Furthermore, the proposed project's contribution to vehicular noise levels would not exceed the applicable thresholds of significance, which take into account existing noise levels as well as noise from trips associated with other planned or approved projects. Finally, because most of the other projects included within the scope of the transportation analysis are more than 1 mile from the project site, cumulative vehicular trips would be unlikely to add to roadway noise levels in the project vicinity. Thus, the proposed project would not combine with other projects to cause a cumulatively significant increase in ambient roadway noise.

4.2.11 - Public Services and Utilities

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service and utility topical areas, they are discussed separately.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the American Canyon Fire Protection District service area, which consists of the American Canyon city limits.

The proposed project would result in the development of 2.4 million square feet of high-cube warehouse on the project site. The project site is located within 3.1 miles of the nearest fire station and is within an acceptable response time for fire protection (5 minutes or less). As such, the proposed project would not create a need for new or expanded fire protection facilities and would not result in a physical impact on the environment. Additionally, the proposed project would comply with all applicable requirements of the California Fire Code, including provision of adequate emergency access points, and it would be accessible to fire apparatus. Other past, present, and reasonably foreseeable development projects in the Fire District service area have been and would be reviewed for impacts on fire protection and emergency medical services and have been and would be required to address any potential impact with mitigation. Additionally, the Fire District plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to fire protection and emergency medical services.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the American Canyon Police Department, which consists of the American Canyon city limits.

The proposed project and other past, present, and reasonably foreseeable projects in the police service area have been and would continue to be reviewed for impacts on police services and also have been and would continue to be required to address any potential impact with mitigation. Additionally, the police department plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to police protection.

4.2.12 - Transportation

The geographic scope of the cumulative transportation analysis is on the nine-county San Francisco Bay Area region. VMT is evaluated and regulated at a regional level and, thus, the San Francisco Bay Area region is an appropriate geographical area.

Impact TRANS-1 concluded that the proposed project would not have a significant impact on the circulation system and, therefore, no mitigation would be necessary. As such, the proposed project would not have a cumulative considerable contribution in this regard. Impact TRANS-2 concluded that the proposed project would not have a significant impact on VMT because the proposed project would have a VMT rate of 16.24, well below the regional average of 23.00. As such, the proposed project would not have a cumulative considerable contribution in VMT.

With respect to Impact TRANS-3, the potential hazards from design features or incompatible uses are project site specific (e.g., site access, sight distance, etc.) and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects have complied and must comply with local, standard requirements for transportation-related design features specifically adopted to avoid and reduce hazards from project design or the location of incompatible uses, thereby reducing the potential for significant cumulative impacts to less than significant levels. Therefore, no significant adverse cumulative impacts would result from the proposed project combined with past, present, and probable future projects.

With respect to Impact TRANS-4, the provision of adequate emergency access is site specific and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects must comply with local, standard requirements for adequate emergency access specifically adopted to avoid or reduce the potential for inadequate access. Furthermore, the proposed project and other projects would not have significant impacts on the performance of the study intersections and, therefore, it can be inferred that it would also not impair emergency response to the project vicinity. Therefore, no significant adverse cumulative impacts would result.

4.2.13 - Utilities and Service Systems

Water

The geographic scope of the cumulative potable water analysis is the City of American Canyon Public Works Department service area, which encompasses the American Canyon city limits.

The proposed project's estimated demand is 23.9 acre-feet of potable water and 82.1 acre-feet of recycled water annually. The City of American Canyon 2015 Urban Water Management Plan (2015 UWMP) indicates that potable water demand and supplies would total 3,350 acre-feet and recycled water demand and supply would total 1,146 acre-feet in 2025. The proposed project's demands would represent less than 1 percent of potable water supplies and 7 percent of recycled water supplies. Furthermore, the City of American Canyon's 2015 UWMP estimates that sufficient water is available to meet the needs of the service area through the year 2040, which accounts for the City of American Canyon's long-term growth assumptions. The City has adopted the Zero Water Footprint Policy that requires all new development to completely offset its potable water demand. This is accomplished by means including, but not limited to: replacing existing potable water use with recycled water use; securing new water supplies; or repairing infrastructure to eliminate existing losses of potable water. The proposed project is required to comply with this policy, as would other projects listed in Table 4-1 that are served by the City of American Canyon's Water District.

For those projects that are located within the City's water service area and areas in the County that were included in the original water district service area, the 2015 UWMP anticipates adequate water supplies for all water year scenarios through 2040. These projects also would be required to demonstrate that they would be served with potable water service as a standard requirement of the development review process, and these projects may be required to implement water conservation measures and to meet the requirements of the Zero Water Footprint Policy. Furthermore, the proposed project does not require any off-site water facilities to be constructed and expanded and, thus, would not result in physical impacts on the environment from such activities. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to potable water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the American Canyon Wastewater Treatment Plant service area, which encompasses the American Canyon city limits and areas within the Napa County Airport Industrial Park south of Fagan Creek.

The treatment plant has an existing design capacity of 2.5 million gallons per day (mgd) and the City has plans to increase it to 4.0 mgd over time. All future projects that are tributary to the American Canyon Wastewater Treatment Plant would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided. The proposed project is estimated to generate 402,500 gallons of wastewater on a daily basis (0.41 mgd) at buildout. The proposed project's estimated wastewater generation of 0.41 mgd per day would represent 10 percent of the average daily flow treated by the expanded Wastewater Treatment Plant.

The sewer flows assumed from the proposed project are significantly less than anticipated for industrial projects in previous City planning documents. The lower sewer flows are a direct result of the conservation activities that reduce water use and, in turn, reduce sewer flows. The original planning documents were drafted prior to the State passing all the conservations laws (2008-2010) and before the City defined the Zero Water Footprint Policy. Thus, conservation is the main reason for reduced sewer flows estimated in previous planning documents. The City has verified that the treatment plant has enough capacity to serve the planned development for Phases 1 and 2 of the proposed project, along with other projects that would be tributary to the Wastewater Treatment Plant. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon city limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharges flows into the Napa River. The City maintains a Storm Drainage Master Plan and engineering standards that guide development of the municipal storm drainage system.

All future development projects in the City are required to provide storm drainage facilities that collect and detain stormwater. The storm drainage facility shall include provisions for future

upstream development and no development shall discharge at a rate that exceeds the capacity of any portion of the existing downstream system. Runoff from storms up to the 100-year return frequency are conveyed through storm facilities and disposed of in a manner that protects public and private improvements from flood hazards. The proposed project would install an on-site storm drainage system consisting of inlets, piping, and a series of detention basins. The peak discharge from the detention basin shall not exceed 90 percent of the undeveloped peak flow from the 24-hour, 100-year storm event. As such, the proposed project would ensure no net increase in stormwater would leave the project site during a peak storm event and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained. The proposed project would implement standard stormwater pollution prevention measures during construction to ensure downstream water quality impacts are minimized to the greatest extent possible. In addition, the proposed project would provide water quality measures to prevent pollution during project operations. Most past, and all present and reasonably foreseeable future, development must comply with these State and local requirements that ensure no significant adverse cumulative impacts would result. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the City of American Canyon. American Canyon Recology provides solid waste and recycling collection services to commercial customers in the City of American Canyon.

Many past and all present and reasonably foreseeable future development projects, which have or would generate construction and operational solid waste and, depending on the volumes and end uses, have been or would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 6,536 cubic yards of solid waste during construction and 8,064 cubic yards annually during operations. For comparison purposes, the Potrero Hills Landfill has a remaining capacity of 38.8 million cubic yards. The proposed project's construction and operational solid waste generation would represent less than 1 percent of the remaining capacity at this facility. As such, it appears that sufficient capacity would be available to serve the proposed project as well as existing and planned land uses in the City of American Canyon for the foreseeable future. Additionally, the nearby Devlin Road Transfer Station offers construction and demolition debris recycling and incentivizes such activities through pricing. Thus, it would be expected that some of the projects listed in Table 4-1 would take advantage of construction and demolition debris recycling, which would divert materials from the solid waste stream and contribute to conserving landfill capacity, thereby extending the operational life of Potrero Hills Landfill. Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to solid waste.

CHAPTER 5: ALTERNATIVES TO THE PROPOSED PROJECT

5.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision-makers and the general public with a reasonable number of feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines § 15126.6).

- An EIR need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

5.1.1 - Significant Unavoidable Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Consistency With Air Quality Management Plan:** The proposed project would result in exceedances of regional emissions thresholds and, therefore, be inconsistent with the Bay Area Air Quality Management District (BAAQMD) regional air quality planning assumptions. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reconcile this inconsistency. Therefore, the significance after mitigation is significant and unavoidable.
- **Cumulative Criteria Pollutant Emissions Impacts:** The project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Mitigation is proposed requiring the implementation of air emissions reduction measures, but it would not fully reduce this impact to a level of less than significant. Therefore, the significance after mitigation is significant and unavoidable.

5.1.2 - Alternatives to the Proposed Project

The three alternatives to the proposed project analyzed in this section are as follows:

- **No Project/No Development Alternative:** The project site would remain undeveloped for the foreseeable future and no development would occur.

- **No Project/Existing General Plan Alternative:** A 2.4-million-square-foot food and beverage processing facility would be developed on the project site.
- **Reduced Density Alternative:** A 1.6-million-square-foot logistics center would be developed on the project site, which represents a 25 percent reduction in square footage relative to the proposed project. The layout and project boundaries would remain the same as the proposed project.
- **Phase 1 Only Alternative:** Phase 1 of the proposed project would be developed, which consists of approximately 1.1 million square feet of high-cube warehouse on 95 acres. Phase 2 would not be developed, and the remaining 113 acres would remain undeveloped.

Three alternatives to the proposed project are analyzed below. These analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both the project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

5.2 - Project Objectives and Underlying Purpose

The underlying purpose of the proposed project is to develop industrially-zoned undeveloped land within the American Canyon city limits to its highest and best use.

As stated in Section 2, Project Description, the objectives of the proposed project are to:

1. Promote economic growth in American Canyon by attracting new industries.
2. Promote development that that generates net positive tax revenues for the City by generating more in new tax revenues than are consumed by City expenditures on services provided to the development.
3. Create new employment opportunities for residents of Napa County and the surrounding region.
4. Develop compatible land uses near the Napa County Airport in the interests of avoiding interference with aviation operations.
5. Improve American Canyon's jobs-housing ratio by adding new employment opportunities.
6. Continue the orderly development of the Devlin Road corridor with a well-designed project.
7. Further the goals and policies of the City of American Canyon General Plan by developing land contemplated to support urban development to its highest and best use.
8. Preserve the most biologically sensitive portions of the project site as open space.

9. Install circulation improvements along Green Island Road and Devlin Road that provide efficient ingress and egress to the proposed project while also ensuring these facilities operate at acceptable levels.
10. Promote public safety by incorporating security measures into the project design.
11. Mitigate impacts on the environment through implementation of feasible mitigation measures.

5.3 - Alternative 1—No Project/No Development Alternative

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a "No Project Alternative," which is intended to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. In cases where the project constitutes a land development project, the No Project Alternative is the "circumstance under which the project does not proceed." For many projects, the No Project Alternative represents a "No Development" scenario, in which the project site remains in its existing condition and no development occurs for the foreseeable future. However, CEQA Guidelines Section 15126.6(e)(3)(B) establishes that "If disapproval of the project under consideration would result in predictable actions by others such as the proposal of some other project, this 'no project' consequence should be discussed." In the interests of informed decision-making, this EIR shall consider both a No Project/No Development Alternative and a No Project/Existing General Plan Alternative.

Under the No Project/No Development Alternative, the project site would remain undeveloped for the foreseeable future.

5.3.1 - Impact Analysis

The project site would remain undeveloped for the foreseeable future. Accordingly, this alternative would avoid all of the proposed project's significant impacts (including significant and unavoidable impacts), as well as the need to implement any mitigation measures.

5.3.2 - Conclusion

The No Project/No Development Alternative would avoid the proposed project's significant and unavoidable impacts and would avoid any potential impacts related to all environmental topical areas. However, this alternative would not advance any of the project objectives, including those related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of American Canyon with a high-quality, employment-generating industrial development; and serving local and regional demand for manufacturing, logistics warehouse, and other industrial uses. Finally, it should be noted that the project site is zoned for industrial use, has been the subject of previous industrial development proposals, and is currently served with infrastructure suitable for this type of development. Thus, should the proposed project not advance, it would be expected that another industrial development proposal would be submitted.

5.4 - Alternative 2–No Project/Existing General Plan Alternative

Under the No Project/Existing General Plan Alternative, the project site would be developed as 2.4 million square feet of food and beverage processing uses. This alternative would have the same development footprint as the proposed project, albeit with single buildings on either side of Devlin Road. The end user would be a large-scale manufacturer of locally sourced food and beverage products such fruits, vegetables, sauces, oils, specialty items, wine, and beer.

Table 5-1: No Project/Existing General Plan Alternative

Scenario	Total Acres	Developed Acres	End Use	Square Feet
No Project/Existing General Plan Alternative	208	163	Food and beverage processing	2,400,000
Proposed Project	208	163	High-Cube Warehouse	2,400,000
Difference	–	–	–	–
Source: FirstCarbon Solutions (FCS) 2021.				

5.4.1 - Impact Analysis

Aesthetics, Light, and Glare

The No Project/Existing General Plan Alternative consists of developing 2.4 million square feet of food and beverage processing uses and associated infrastructure on the project site. Similar exterior light fixtures would be installed, and Mitigation Measure (MM) AES-3 would be implemented. The buildings developed under this alternative would be industrial in appearance similar to other structures in the Green Island Road Business Park. Therefore, the No Project/Existing General Plan Alternative would have similar aesthetics, light, and glare impacts as the proposed project.

Air Quality

The No Project/Existing General Plan Alternative would result in an equivalent amount of construction activity and 5,544 more daily vehicle trips (refer to Table 5-2), which have an approximately 240 percent increase in operational criteria pollutant and toxic air contaminant (TAC) emissions, assuming an equal fleet proportion of passenger vehicles versus trucks as that considered in the proposed project. Additionally, this alternative would attract more truck trips beyond what was considered under the proposed project and, thus, increase the severity of the significant unavoidable sensitive receptor impact. MM AIR-2a, MM AIR-2b, MM AIR-2c, and MM AIR-2d would be implemented under this alternative. This alternative would increase the severity of the proposed project's significant unavoidable air quality impacts by emitting more pollutants from operational activities. Therefore, this alternative would have greater impact on air quality than the proposed project.

Biological Resources

Similar ground-disturbing activities would occur within the same development footprint as the proposed project, and MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM BIO-1e, MM BIO-3a, MM BIO-3b, MM BIO-3c, and MM BIO-4 would be implemented. Therefore, the No Project/Existing General Plan Alternative would have similar biological resources impacts as the proposed project.

Cultural and Tribal Cultural Resources

Similar ground-disturbing activities would occur within the same development footprint as the proposed project, and MM CUL-1a, MM CUL-1b, MM CUL-2, and MM CUL-3 would be implemented. Therefore, the No Project/Existing General Plan Alternative would have similar cultural resources impacts as the proposed project.

Geology, Soils, and Seismicity

Similar development activities would occur within the same development footprint, and MM GEO-1a and MM GEO-1b would be implemented. Therefore, the No Project/Existing General Plan Alternative would have similar geology, soils, and seismicity resources impacts as the proposed project.

Greenhouse Gas Emissions and Energy

The No Project/Existing General Plan Alternative would result in an equivalent amount of construction activity and 5,544 more daily vehicle trips (refer to Table 5-2), which have an approximately 240 percent increase in operational greenhouse gas (GHG) emissions, assuming an equal fleet proportion of passenger vehicles versus trucks as that considered in the proposed project. MM GHG-1a and MM GHG-1b would be implemented under this alternative. This alternative would increase the severity of the proposed project's significant unavoidable GHG impacts by emitting more pollutants from operational activities. Therefore, this alternative would have greater impact on GHG emissions than the proposed project.

Hazards and Hazardous Materials

As with the proposed project, no hazardous conditions exist on-site, and, therefore, impacts would be less than significant. This alternative would develop a 2.4-million-square-foot food and beverage processing facility, which would not involve the routine use of hazardous materials. Therefore, this alternative would have similar hazards and hazardous materials impacts as the proposed project.

Hydrology and Water Quality

Similar ground-disturbing activities would occur within the same development footprint, and MM HYD-1a and MM HYD-1b would be implemented. This alternative would develop an equivalent amount if impervious surface coverage as the proposed project and, thus, have equivalent drainage impacts. Therefore, the No Project/Existing General Plan Alternative would have similar hydrology and water quality impacts as the proposed project.

Land Use

This alternative would develop a 2.4-million-square-foot food and beverage processing facility, which is allowable under the existing General Plan and Zoning designations for the project site. Therefore, it would yield similar conclusions in terms of consistency with the City of American Canyon General Plan and the American Canyon Zoning Ordinance. Food and beverage processing would emit sources of steam, which have the potential to conflict with the provisions of the Napa County Airport Land Use Compatibility Plan. Therefore, the No Project/Existing General Plan Alternative would have greater land use impacts than the proposed project.

Noise

The No Project/Existing General Plan Alternative would result in equivalent construction activity and 5,544 more daily vehicle trips (refer to Table 5-2), which would have corresponding increases in the severity of operational noise impacts. MM NOI-1 would be implemented under this alternative. Although this alternative would implement mitigation measures similar to the proposed project, the increase in vehicle trips would increase the severity of noise impacts. Therefore, this alternative would have greater impact on noise than the proposed project.

Public Services

End uses would be similar to the proposed project. Although the proposed project's public services impacts were found to be less than significant and did not require mitigation, this alternative would result in less demand for fire protection and police protection through the 600,000-square-foot reduction in development potential. Accordingly, no new or expanded fire or police facilities would be required. Therefore, the No Project/Existing General Plan Alternative would have less impact on public services than the proposed project.

Transportation

Table 5-2 summarizes the daily and peak-hour trip generation associated with the No Project/Existing General Plan Alternative. As shown in the table, this alternative would yield an increase of 5,544 daily vehicle trips, 1,248 AM peak-hour vehicle trips, and 1,344 PM peak-hour vehicle trips. Although the proposed project's transportation impacts were found to be less than significant and did not require mitigation, the substantial increase in Vehicle Miles Traveled (VMT) by the No Project/Existing General Plan Alternative would be considered detrimental from a transportation perspective. The No Project/Existing General Plan Alternative would have greater transportation impacts than the proposed project.

Table 5-2: No Project/Existing General Plan Alternative Trip Generation Comparison

Scenario	Daily	AM Peak-hour	PM Peak-hour
No Project/Existing General Plan Alternative	9,432	1,488	1,608
Proposed Project	3,888	240	264
Difference	**5,544**	**1,248**	**1,344**

Notes:
Source: W-Trans, 2021; FirstCarbon Solutions (FCS) 2021.

Utilities and Service Systems

The No Project/Existing General Plan Alternative end uses would consist of food and beverage processing, which would demand more water and generate more effluent and solid waste by an estimated 240 percent. The proposed project's utilities and service system impacts were found to be less than significant and did not require mitigation. Because this alternative would result in an approximately 240 percent increase in demand for water and an approximately 240 percent increase in generation of wastewater and solid waste, it would have more severe impacts on utilities and service systems. Therefore, the No Project/Existing General Plan Alternative would have less impact on utilities and service systems than the proposed project.

5.4.2 - Conclusion

The No Project/Existing General Plan Alternative would not avoid the significant and unavoidable air quality and GHG emissions impacts associated with the proposed project and in fact would increase the severity of these impacts. The No Project/Existing General Plan Alternative would increase the severity of impacts associated with land use, noise, public services, transportation, and utilities. Additionally, the No Project/Existing General Plan Alternative would have similar impacts on aesthetics, biological resources, cultural resources, geology, hazards, and hydrology and water quality.

The No Project/Existing General Plan Alternative would advance most of the project objectives including those related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of American Canyon with a high-quality, employment-generating industrial development. However, the change of the end use would not advance the project objective concerning serving local and regional demand for logistics warehouse uses.

5.5 - Alternative 3—Reduced Density Alternative

Under the Reduced Density Alternative, a 1.6 million square-foot logistics center would be developed on the project site, which represents a 25 percent reduction in the proposed project's square footage. This would yield a 600,000-square-foot reduction in buildout potential, which would be applied proportionately to all project buildings. The reduction in building square footage would allow for 10 additional acres of the site to be preserved in its natural state.

The project boundaries, layout, (including disturbance area) and high-cube warehouse end uses would remain the same. Vehicular access points would remain at the same locations. The Napa Valley Vine Trail would be constructed along the project's frontages with Devlin Road and Green Island Road.

Table 5-3 summarizes the Reduced Density Alternative. The purpose of this alternative is to evaluate a smaller project with end uses identical to the proposed project that may avoid or substantially lessen the severity of significant project impacts.

Table 5-3: Reduced Density Alternative

Scenario	Total Acres	Developed Acres	End Use	Square Feet
Reduced Density Alternative	208	153	High-Cube Warehouse	1,800,000
Proposed Project	208	163	High-Cube Warehouse	2,400,000
Difference	**–**	**(10)**	**–**	**(600,000)**
Source: FirstCarbon Solutions (FCS) 2021.				

5.5.1 - Impact Analysis

Aesthetics, Light, and Glare

The Reduced Density Alternative consists of developing 1.8 million square feet of high-cube warehouse uses and associated infrastructure on the project site. Similar exterior light fixtures would be installed, and MM AES-3 would be implemented. The buildings developed under this alternative would retain a similar appearance to the proposed project's structures; however, 600,000-square-foot reduction in warehouses would reduce the amount of development on the project site and add 10 acres to the open, natural area of the site. Therefore, the Reduced Density Alternative would have less impact on aesthetics, light, and glare than the proposed project.

Air Quality

The Reduced Density Alternative would result in less construction activity and 972 fewer daily vehicle trips (refer to Table 5-4), which have an approximately 25 percent reduction in construction and operational criteria pollutant and TAC emissions. Additionally, this alternative would attract approximately 25 percent fewer truck trips and passenger vehicle trips and, thus, lessen the severity of the significant unavoidable sensitive receptor impact. MM AIR-2a, MM AIR-2b, MM AIR-2c, and MM AIR-2d would be implemented under this alternative. Although this alternative would not avoid the proposed project's significant unavoidable air quality impacts, it would lessen the severity by emitting fewer pollutants from operational activities. Therefore, this alternative would have less impact on air quality than the proposed project.

Biological Resources

Similar ground-disturbing activities would occur within the same development footprint as the proposed project, and MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MMBIO-1e, MM BIO-3a, MM BIO-3b, MM BIO-3c, and MM BIO-4 would be implemented. Therefore, the Reduced Density Alternative would have similar biological resources impacts as the proposed project.

Cultural and Tribal Cultural Resources

Similar ground-disturbing activities would occur within the same development footprint as the proposed project, and MM CUL-1a, MM CUL-1b, MM CUL-2, and MM CUL-3 would be implemented. Therefore, the Reduced Density Alternative would have similar cultural resources impacts as the proposed project.

Geology, Soils, and Seismicity

Similar development activities would occur within the same development footprint, and MM GEO-1a and MM GEO-1b would be implemented. Therefore, the Reduced Density Alternative would have similar geology, soils, and seismicity resources impacts as the proposed project.

Greenhouse Gas Emissions and Energy

The Reduced Density Alternative would result in less construction activity and 972 fewer daily vehicle trips (refer to Table 5-4), which have corresponding reductions in the severity of construction and operational greenhouse gas emissions. MM GHG-1a and MM GHG-1b would be implemented under this alternative. Although this alternative would not avoid the proposed project's significant unavoidable greenhouse gas impacts, it would lessen the severity by emitting fewer emissions from operational activities. Therefore, this alternative would have less impact on GHGs than the proposed project.

Hazards and Hazardous Materials

As with the proposed project, no hazardous conditions exist on-site, and, therefore, impacts would be less than significant. This alternative would result in a 600,000-square-foot reduction in high-cube warehouse development potential and, thus, would reduce the potential for hazardous material releases during construction and operations. Therefore, this alternative would have less impact on hazards and hazardous materials than the proposed project.

Hydrology and Water Quality

Similar ground-disturbing activities would occur within the same development footprint, and MM HYD-1a and MM HYD-1b would be implemented. This alternative would reduce the project's less than significant (after mitigation) hydrology and water quality impacts because there would be less impervious surface coverage. Therefore, the Reduced Density Alternative would have less impact on hydrology and water quality than the proposed project.

Land Use

This alternative would develop similar uses to the proposed project, and, therefore, would yield similar conclusions in terms of consistency with the City of American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan. Thus, MM LU-3 would be implemented to reduce wildlife hazards associated with aviation to a level of less than significant. Therefore, the Reduced Density Alternative would have land use impacts similar to the proposed project.

Noise

The Reduced Density Alternative would result in less construction activity and 972 fewer daily vehicle trips (refer to Table 5-4), which would have corresponding reductions in the severity of construction and operational noise impacts. MM NOI-1 would be implemented under this alternative. Although this alternative would implement mitigation measures similar to the proposed project, the reduction in development potential and vehicle trips would reduce the severity of noise impacts. Therefore, this alternative would have less impact on noise than the proposed project.

Public Services

End uses would be similar to the proposed project. Although the proposed project's public services impacts were found to be less than significant and did not require mitigation, this alternative would result in less demand for fire protection and police protection through the 600,000-square-foot reduction in development potential. Accordingly, no new or expanded fire or police facilities would be required. Therefore, the Reduced Density Alternative would have less impact on public services than the proposed project.

Transportation

Table 5-4 summarizes the daily and peak-hour trip generation associated with the Reduced Density Alternative. As shown in the table, this alternative would yield a reduction of 972 daily vehicle trips, 60 AM peak-hour vehicle trips, and 66 PM peak-hour vehicle trips. Although the proposed project's transportation impacts were found to be less than significant and did not require mitigation, the substantial reduction in VMT by the Reduced Density Alternative would be considered beneficial from a transportation perspective. The Reduced Density Alternative would have less transportation impacts than the proposed project.

Table 5-4: Reduced Density Alternative Trip Generation Comparison

Scenario	Daily	AM Peak-hour	PM Peak-hour
Reduced Density Alternative	2,916	180	198
Proposed Project	3,888	240	264
Difference	**(972)**	**(60)**	**(66)**

Notes:
Source: W-Trans, 2021; FirstCarbon Solutions (FCS) 2021.

Utilities and Service Systems

End uses would be similar to the proposed project. Although the proposed project's utilities and service system impacts were found to be less than significant and did not require mitigation, this alternative would result in an approximately 25 percent reduction in demand for water, and energy, and an approximately 25 percent reduction in generation of wastewater and solid waste through the 600,000-square-foot reduction in development potential. Therefore, the Reduced Density Alternative would have less impact on utilities and service systems than the proposed project.

5.5.2 - Conclusion

The Reduced Density Alternative would lessen the severity of, but would not avoid, the significant and unavoidable air quality and GHG emissions impacts associated with the proposed project. Additionally, the Reduced Density Alternative would lessen the severity of several of the significant impacts that can be reduced to a level of less than significant with mitigation (e.g., hydrology and water quality, and noise).

The Reduced Density Alternative would advance all of the project objectives, with several advanced to a lesser degree. However, the reduction in square footage would result in fewer positive economic benefits and, thus, would advance the project objectives to a lesser degree. (For example, this alternative would be expected to employ fewer workers than the proposed project.) This includes objectives related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of American Canyon with a high-quality, employment-generating industrial development; and serving local and regional demand for logistics warehouse uses.

5.6 - Alternative 3—Phase 1 Only Alternative

Phase 1 of the proposed project would be developed, which consists of 1.1 million square feet on 95 acres. Phase 2 would not be pursued, and the remaining 113 acres would remain undeveloped as a wetland preserve.

Phase 1 would have the same layout and boundaries as the proposed project. Two high-cube warehouses totaling 1.1 million square feet would be developed on 95 acres north of Green Island Road and west of Devlin Road. Vehicular access would be taken from both roadways. Phase 2 would remain undeveloped for the foreseeable future.

Table 5-5 summarizes the Phase 1 Only Alternative. The purpose of this alternative is to evaluate the phase of the project most likely to develop in the near-term and also reduce the development footprint and buildout potential to avoid or substantially lessen the severity of significant project impacts.

Table 5-5: Phase 1 Only Alternative

Scenario	Total Acres	Developed Acres	End Use	Square Feet
Phase 1 Only Alternative	95	72	High-Cube Warehouse	1,100,000
Proposed Project	208	163	High-Cube Warehouse	2,400,000
Difference	**(113)**	**(91)**	**–**	**(1,300,000)**
Source: FirstCarbon Solutions (FCS) 2021.				

5.6.1 - Impact Analysis

Aesthetics, Light, and Glare

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. Similar exterior light fixtures would be installed, and MM AES-3 would be implemented. The buildings developed under this alternative would retain a similar appearance to the proposed project's structures; however, 1.3-million-square-foot reduction in warehouses would reduce the amount of development and add 113 acres to the open, natural area of the site.

Therefore, the Phase 1 Only Alternative would reduce the proposed project's less than significant impacts on aesthetics, light, and glare.

Air Quality

The Phase 1 Only Alternative would result in less construction activity and 2,106 fewer daily vehicle trips (refer to Table 5-6), which have an approximately 55 percent reduction in criteria pollutant and TAC emissions. Additionally, this alternative would attract fewer truck trips and, thus, lessen the severity of the significant unavoidable sensitive receptor impact. MM AIR-2, MM AIR-3a, and MM AIR-3b would be implemented under this alternative. Although this alternative would not avoid the proposed project's significant unavoidable air quality impacts, it would lessen the severity by emitting fewer pollutants from operational activities. Therefore, this alternative would have less impact on air quality than the proposed project.

Biological Resources

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. Similar development activities would occur for Phase 1 and, therefore, MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM BIO-1e, MM BIO-3a, MM BIO-3b, MM BIO-3c, and MM BIO-4 would be implemented. However, the elimination of Phase 2 would lessen the potential for impacts to biological resources. Therefore, the Phase 1 Only Alternative would less impact on biological resources impacts than the proposed project.

Cultural and Tribal Cultural Resources

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. Similar development activities would occur for Phase 1 and, therefore, MM CUL-1a, MM CUL-1b, MM CUL-2, and MM CUL-3 would be implemented. However, the elimination of Phase 2 would lessen the potential for impacts to cultural resources. Therefore, the Phase 1 Only Alternative would less impact on cultural resources impacts than the proposed project.

Geology, Soils, and Seismicity

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. Similar development activities would occur for Phase 1 and, therefore, MM GEO-1a and MM GEO-1b would be implemented. However, the elimination of Phase 2 would lessen the potential for impacts to geology, soils, and seismicity. Therefore, the Phase 1 Only Alternative would have less impact on geology, soils, and seismicity than the proposed project.

Greenhouse Gas Emissions and Energy

The Phase 1 Only Alternative would result in less construction activity and 2,106 fewer daily vehicle trips (refer to Table 5-6), which have an approximately 55 percent reduction in the severity of GHG emissions. MM GHG-1 and MM GHG-2 would be implemented under this alternative. Although this alternative would not avoid the proposed project's significant unavoidable GHG emission impacts, it

would lessen the severity by emitting fewer emissions from operational activities. Therefore, this alternative would have less impact on GHG emissions than the proposed project.

Hazards and Hazardous Materials

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. As with the proposed project, no hazardous conditions exist on-site, and, therefore, impacts would be less than significant. This alternative would result in a 1.3-million-square-foot reduction in high-cube warehouse development potential and, thus, would reduce the potential for hazardous material releases during construction and operations. Therefore, this alternative would have less impact on hazards and hazardous materials than the proposed project.

Hydrology and Water Quality

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. Similar development activities would occur for Phase 1 and, therefore, MM HYD-1a and MM HYD-1b would be implemented. However, the elimination of Phase 2 would lessen the potential for impacts to hydrology and water quality. Therefore, the Phase 1 Only Alternative would have less impact on hydrology and water quality than the proposed project.

Land Use

The Phase 1 Only Alternative consists of developing 1.1 million square feet of high-cube warehouse uses and associated infrastructure on 95 acres. The remaining 113 acres would remain undeveloped for the foreseeable future. This alternative would develop similar uses to the proposed project, and, therefore, would yield similar conclusions in terms of consistency with the City of American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan. Thus, MM LU-3 would be implemented to reduce wildlife hazards associated with aviation to a level of less than significant. Therefore, the Phase 1 Only Alternative would have land use impacts similar to the proposed project.

Noise

The Phase 1 Only Alternative would result in less construction activity and 2,106 fewer daily vehicle trips (refer to Table 5-6), which would have corresponding reductions in the severity of construction and operational noise impacts. MM NOI-1 would be implemented under this alternative. Although this alternative would implement mitigation measures similar to the proposed project, the reduction in development potential and vehicle trips would reduce the severity of noise impacts. Therefore, this alternative would have less impact on noise than the proposed project.

Public Services

End uses would be similar to the proposed project. Although the proposed project's public services impacts were found to be less than significant and did not require mitigation, this alternative would result in less demand for fire protection and police protection through the 1.3-million-square-foot

reduction in development potential. Therefore, the Phase 1 Only Alternative would have less impact on public services than the proposed project.

Transportation

Table 5-6 summarizes the daily and peak-hour trip generation associated with the Phase 1 Only Alternative. As shown in the table, this alternative would yield a reduction of 2,106 daily vehicle trips, 130 AM peak-hour vehicle trips, and 143 PM peak-hour vehicle trips. Although the proposed project's transportation impacts were found to be less than significant and did not require mitigation, the substantial reduction in VMT by the Phase 1 Only Alternative would be considered beneficial from a transportation perspective. The Phase 1 Only Alternative would have less transportation impacts than the proposed project.

Table 5-6: Phase 1 Only Alternative Trip Generation Comparison

Scenario	Daily	AM Peak-hour	PM Peak-hour
Phase 1 Only Alternative	1,782	110	121
Proposed Project	3,888	240	264
Difference	**(2,106)**	**(130)**	**(143)**
Source: W-Trans, 2021; FirstCarbon Solutions (FCS) 2021.			

Utilities and Service Systems

End uses would be similar to the proposed project. Although the proposed project's utilities and service system impacts were found to be less than significant and did not require mitigation, this alternative would result in an approximately 55 percent reduction in demand for water, and energy, and an approximately 55 percent reduction in generation of wastewater and solid waste through the 1.3-million-square-foot reduction in development potential. Therefore, the Phase 1 Only Alternative would have less impact on utilities and service systems than the proposed project.

5.6.2 - Conclusion

The Phase 1 Only Alternative would lessen the severity of, but would not avoid, the significant and unavoidable air quality and GHG emissions impacts associated with the proposed project. Additionally, the Phase 1 Only Alternative would lessen the severity of several of the significant impacts that can be reduced to a level of less than significant with mitigation (e.g., biological resources, cultural resources, hydrology and water quality, and noise).

The Phase 1 Only Alternative would advance all of the project objectives, with several advanced to a lesser degree. However, the reduction in square footage would result in fewer positive economic benefits and, thus, would advance the project objectives to a lesser degree. (For example, this alternative would be expected to employ fewer workers than the proposed project.) This includes objectives related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of

American Canyon with a high-quality, employment-generating industrial development; and serving local and regional demand for logistics warehouse uses.

As a practical matter, the project applicant has a 100-year lease agreement with the property owner, and it would be unlikely that it forgo development on the Phase 2 portion of the project site. Moreover, the project site is the single largest undeveloped site in the City of American Canyon and is zoned for industrial use. Preserving 113 acres the site as a wetland preserve would not represent the highest and best use of the property, particularly since approximately 45 acres of the project site would be assigned for this use.

5.7 - Environmentally Superior Alternative

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 5-7.

Table 5-7: Summary of Alternatives

Environmental Topic Area	Issue(s)	No Project/No Development Alternative	No Project/Existing General Plan Alternative	Reduced Density Alternative	Phase 1 Only Alternative
Aesthetics, Light, and Glare	Scenic Vistas; Visual Character; Light and Glare	Less impact	Similar impact	Less impact	Less impact
Air Quality	Air Quality Plan, Criteria Pollutants, Toxic Air Contaminants	Less impact	Greater Impact	Less impact	Less impact
Biological Resources	Special-status species; Wetlands, Wildlife Movement	Less impact	Similar impact	Similar impact	Less impact
Cultural and Tribal Cultural Resources	Historic Resources, Archaeological Resources; Human Remains; Tribal Cultural Resources	Less impact	Similar impact	Similar impact	Less impact
Geology, Soils, and Seismicity	Seismic Hazards; Erosion; Unstable Geologic Units; Expansive Soils	Less impact	Similar impact	Similar impact	Less impact
Greenhouse Gas Emissions and Energy	Greenhouse Gas Reduction Plans; Energy	Less impact	Greater impact	Less impact	Less impact
Hazards and Hazardous Materials	Routine Use; Risk of Upset; Aviation Hazards; Emergency Response	Less impact	Similar impact	Less impact	Less impact

Environmental Topic Area	Issue(s)	No Project/No Development Alternative	No Project/Existing General Plan Alternative	Reduced Density Alternative	Phase 1 Only Alternative
Hydrology and Water Quality	Water Quality; Groundwater; Drainage	Less impact	Similar impact	Similar impact	Less impact
Land Use	General Plan; Zoning; Airport Land Use Plan Consistency	Less impact	Greater impact	Similar impact	Similar impact
Noise	Noise Level Standards; Vibration; Aviation Noise	Less impact	Greater impact	Less impact	Less impact
Public Services	Fire; Police	Less impact	Greater impact	Less impact	Less impact
Transportation	Circulation System; Vehicle Miles Traveled; Roadway Hazards; Emergency Access	Less impact	Greater impact	Less impact	Less impact
Utilities and Service Systems	Water; Wastewater; Solid Waste	Less impact	Greater impact	Less impact	Less impact
Source: FirstCarbon Solutions (FCS) 2021.					

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

The No Project/No Development Alternative reduces impacts on all categories and, thus, would be the environmentally superior alternative. Of the three remaining alternatives, the Phase 1 Only Alternative achieves the greatest reduction in impacts both reducing buildout potential and disturbance areas. Therefore, the Phase 1 Only Alternative is the environmentally superior alternative.

5.8 - Alternatives Rejected From Further Consideration

The following alternatives were initially considered, but rejected from further consideration for the reasons described below.

5.8.1 - Phase 2 Only Alternative

A Phase 2 Only Alternative was initially considered as a project alternative. This alternatives analysis evaluated a Phase 1 Only Alternative because it has less acreage and development potential than Phase 2. In addition, development plans are available for Phase 1 whereas Phase 2 is conceptual. Furthermore, the applicant has indicated that Phase 1 would develop first followed by Phase 2.

Hence, evaluating a Phase 2 Only Alternative would be illogical and out-of-sequence and, thus, it was rejected from further consideration.

5.8.2 - Alternative Location

CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that the "key question" is whether any of the significant effects of the proposed project would be avoided or substantially lessened by relocating the proposed project. The CEQA Guidelines identify the following factors that may be taken into account when addressing the feasibility of an alternative location:

1. Site suitability
2. Economic viability
3. Availability of infrastructure
4. General Plan consistency
5. Other plans or regulatory limitations
6. Jurisdictional boundaries
7. Whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site

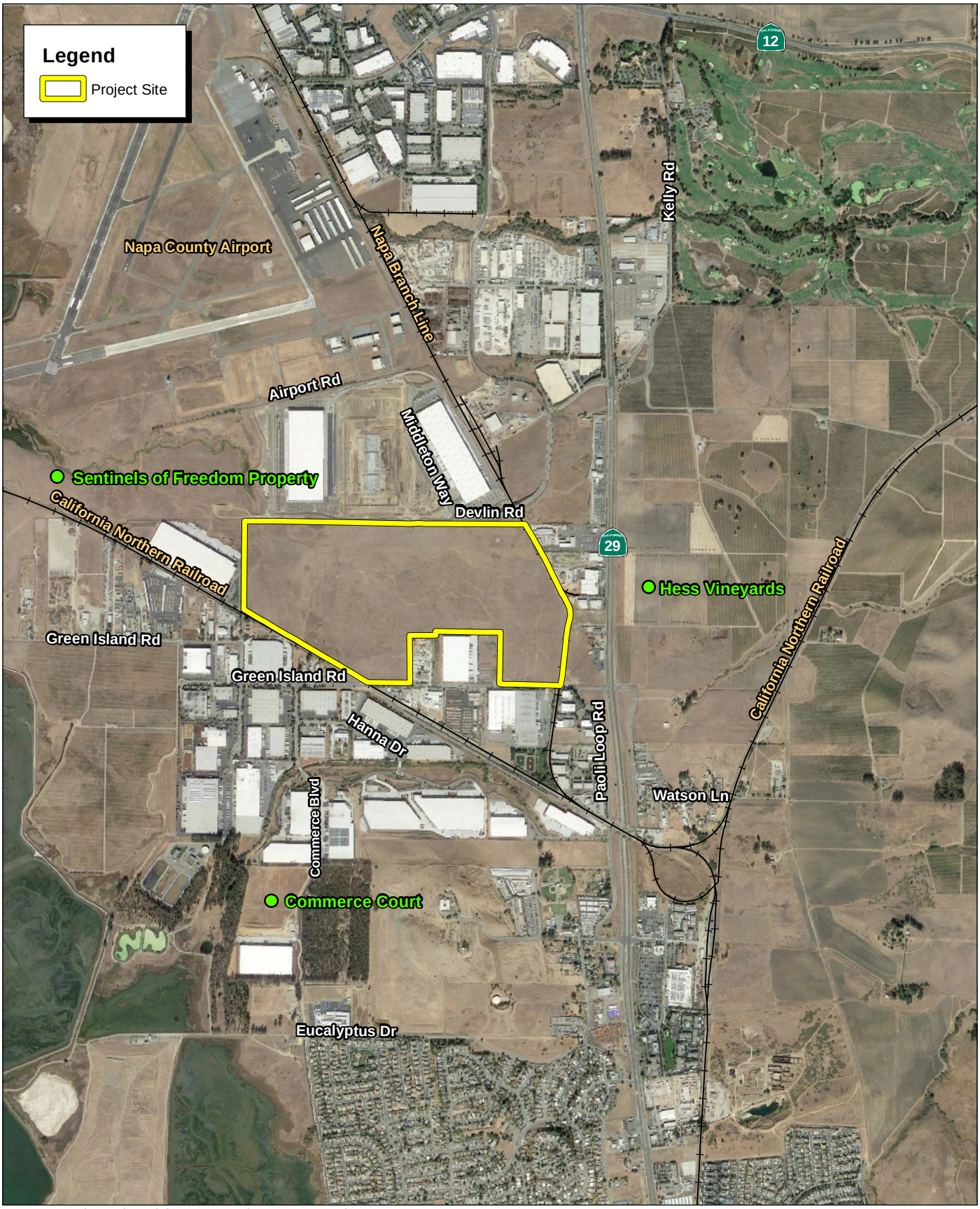
Here, "General Plan consistency" is an important factor. CEQA case law is clear that EIRs for proposed private projects consistent with governing General Plan designations generally need not address alternative sites, given that such existing General Plan designations embody policy decisions already made by governing city councils and boards of supervisors. "[T]he keystone of regional planning is consistency—between the general plan, its internal elements, subordinate ordinances, and all derivative land use decisions." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 572.) "Case-by-case reconsideration of regional land use policies, in the context of a project-specific EIR, is the very antithesis of that goal." (*Id*. at p. 573.) "[A]n EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy." (*Ibid*.)

Table 5-8 evaluates the feasibility of three alternative locations located within 1 mile of the project site in either the City of American Canyon or unincorporated Napa County. The three locations are shown on Exhibit 5-1. As indicated in Table 5-8, none of the three sites would meet CEQA Guidelines criteria for a feasible alternative location.

Table 5-8: Alternative Location Feasibility Analysis

Name	Description	Feasibility Determination
Sentinels of Freedom Property	Approximately 25 acres located west of Napa Logistics Park and south of Napa County Airport in unincorporated Napa County and within the City of American Canyon Sphere of Influence. This site contains undeveloped land, is bisected by No Name Creek, and parts are within a 100-year flood hazard area. This site is designated "Industrial" by the Napa County General Plan and	**Not Feasible:** This site is controlled by the Sentinels of Freedom and is not owned, controlled, or otherwise accessible to the project applicant. The Sentinels of Freedom have conceptually proposed developing two warehouses on the property with vehicular access occurring from either Napa County Airport and the Napa Logistics Park. Additionally, the acreage of this site (25

Name	Description	Feasibility Determination
	zoned "Business/Industrial" by the Napa County Airport Industrial Area Specific Plan.	acres) is 12 percent of the acreage of the project site (208 acres) and, thus, is too small to accommodate the level of development contemplated by the proposed project.
Commerce Court	Approximately 21 acres located near the south end of Commerce Court in the City of American Canyon. The site is undeveloped. This site is designated "Commercial Recreation" by the City of American Canyon General Plan and zoned "Recreation" by the American Canyon Zoning Ordinance. This site is the subject of a development application for two distribution centers (224,000 and 217,000 square feet).	**Not Feasible:** This site is owned by a third party and is not owned, controlled, or otherwise accessible to the project applicant. Additionally, the acreage of this site (21 acres) is 10 percent of the acreage of the project site (208 acres) and, thus, is too small to accommodate the level of development contemplated by the proposed project. Moreover, this site is the subject of an active development application to develop a similar type use as the proposed project and, thus, is not available.
Hess Vineyards	Approximately 100 acres located east of SR-29/S. Kelly Road in unincorporated Napa County. This site contains cultivated agricultural land. This site is designated "Agricultural, Watershed, and Open Space" by the Napa County General Plan and zoned "Agricultural Watershed" by the Napa County Zoning Ordinance.	**Not Feasible:** This site is owned by a third party and is not owned, controlled, or otherwise accessible to the project applicant. Additionally, the acreage of this site (100 acres) is 52 percent of the acreage of the project site (208 acres) and, thus, is too small to accommodate the level of development contemplated by the proposed project. Finally, this property was re-designated from "Industrial" to "Agricultural, Watershed, and Open Space" in 2008, signifying the County's policy direction for this particular property.
Source: FirstCarbon Solutions (FCS) 2021.		



Source: Google Earth Aerial Imagery, 10/2020. County of Napa.

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit 5-1
Alternative Locations

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CHAPTER 6: OTHER CEQA CONSIDERATIONS

6.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(c) requires an Environmental Impact Report (EIR) to identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented.

Based on the analyses contained in this Draft EIR, the City has determined that the proposed project would result in the following significant and unavoidable impacts:

- **Consistency With Air Quality Management Plan:** The proposed project would result in exceedances of regional emissions thresholds and, therefore, be inconsistent with the Bay Area Air Quality Management District regional air quality planning assumptions. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reconcile this inconsistency. Therefore, the significance after mitigation is significant and unavoidable.
- **Cumulative Criteria Pollutant Emissions Impacts:** The proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable federal or State ambient air quality standard. Mitigation is proposed requiring the implementation of air emissions reduction measures, but it would not fully reduce this impact to a level of less than significant. Therefore, the significance after mitigation is significant and unavoidable.

6.2 - Growth-Inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(e)). CEQA Guidelines, as interpreted by the City, state that a significant growth-inducing impact may result if the project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

The proposed project does not include residential uses and therefore would not directly induce population growth.

The proposed project would develop approximately 2.4 million square feet of new high-cube warehouse uses on an undeveloped site. The proposed project would employ an estimated 1,200 workers during construction and 3,643 workers when fully operational at buildout. The proposed project's warehouses would likely be built incrementally over a period of years and, thus, jobs would be added in blocks as the project builds out. As such, there would not be an "overnight" influx of new employment opportunities.

The California Employment Development Department estimated the combined Napa-Solano labor force at 273,500 in October 2021. As such, the local labor force is sufficiently large enough to allow the project's employment opportunities to be filled locally such that unplanned growth would not occur.

During the Notice of Preparation (NOP) review period, the County of Napa requested the Draft EIR evaluate whether there is sufficient housing for project employees. At the time of this writing, no prospective employees have been identified and, thus, it would be speculative to make any statements about where they would reside. Nonetheless, the City of American Canyon has more than 2,400 dwelling units in the pipeline (refer to Table 4-1 in Chapter 4, Cumulative Effects). For comparison purposes, American Canyon's population was estimated to be 20,837. Thus, the addition of more than 2,400 dwelling units to the City's housing inventory would more than offset the employment growth attributable to the proposed project.

The proposed project would be served by connections to existing water, wastewater, storm drainage, electricity, and natural gas lines that exist in Green Island Road or Devlin Road. No extension of infrastructure into unserved areas would be required and, therefore, no removal of physical barriers to growth would occur.

As such, the proposed project would not indirectly induce substantial population growth. No impacts would occur.

6.3 - Energy Conservation

Note to Reader: Section 3.6, Greenhouse Gas Emissions and Energy, also addresses energy conservation.

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F was substantially revised in 2010 to address greenhouse gas emissions and focus on reducing fossil fuel consumption. For the reasons set forth below, this Draft EIR concludes that the proposed project will not result in the wasteful, inefficient, and unnecessary consumption of energy, will not cause the need for additional natural gas or electrical energy-producing facilities, and, therefore, will not create a significant impact on energy resources.

6.3.1 - Regulatory Setting

Federal and state agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares Statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from the normal prohibition against states setting their own fuel economy standards for new on-road motor vehicles. Some of the more relevant federal and State energy-related laws and plans are discussed below.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California residential and

nonresidential consumers have reduced their utility bills by at least $15.8 billion. The latest Title 24 energy efficiency standards went into effect on January 1, 2020.

Pursuant to the California Building Standards Code and the Title 24 Energy Efficiency Standards, the City will review the design and construction components of the project's Title 24 compliance when specific building plans are submitted.

6.3.2 - Energy Requirements of the Proposed Project

Short-term construction and long-term operational energy consumption are discussed below.

Short-Term Construction

The United States Environmental Protection Agency (EPA) regulates nonroad diesel engines that power both mobile equipment (bulldozers, scrapers, front-end loaders, etc.) and stationary equipment (generators, pumps, compressors, etc.). The EPA has no formal fuel economy standards for nonroad (e.g., construction) diesel engines but does regulate diesel emissions, which indirectly affects fuel economy. In 1994, EPA adopted the first set of emission standards ("Tier 1") for all new nonroad diesel engines greater than 37 kilowatts (kW) or 50 horsepower. The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing nitrogen oxide (NO_x) emissions from these engines by 30 percent. Subsequently, the EPA adopted more stringent emission standards for NO_X, hydrocarbons, and particulate matter for new nonroad diesel engines. This program included the first set of standards for nonroad diesel engines less than 37 kW. It also phased in more stringent "Tier 2" emission standards from 2001 to 2006 for all engine sizes and added yet more stringent "Tier 3" standards for engines between 37 and 560 kW (50 and 750 horsepower) from 2006 to 2008. These standards further reduced nonroad diesel engine emissions by 60 percent for NO_X and 40 percent for particulate matter (PM) from Tier 1 emission levels. In 2004, the EPA issued the Clean Air Nonroad Diesel Rule. This rule cut emissions from nonroad diesel engines by more than 90 percent, and was phased in between 2008 and 2014. These emission standards are intended to promote advanced clean technologies for nonroad diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The project site is located within the nine-county San Francisco Bay metropolitan region. Construction equipment is widely available throughout the region and is subject to the aforementioned EPA emissions standards. There are no unusual project characteristics that would necessitate the use of construction equipment that would not meet EPA standards. Therefore, it is expected that construction fuel consumption associated with the project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Long-term Operations

Transportation Energy Demand

Vehicle fuel efficiency is regulated at the federal level. Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards and for revising existing standards. NHTSA indicated that the fuel economy of passenger vehicles averaged 34.2 miles per gallon and light trucks averaged 26.2 miles per gallon. Heavy trucks and other heavy vehicles are not subject to fuel economy standards; however, they average 6.5 miles per gallon.

The proposed project would be well-positioned to serve the North Bay Counties of Napa, Solano, and Sonoma due to its proximity to State Route (SR) 29/SR-12 corridors. All three counties have adopted urban growth boundaries that limit the footprint of urban development. Thus, large footprint land use activities such as logistics centers are limited to very select sites in these three counties, with the Napa Valley Business Park and Green Island Business Park being the primary ones in Napa County.

Building Energy Demand

Marin Clean Energy (MCE) is the electricity provider and Pacific Gas and Electric Company (PG&E) is the natural gas provider to American Canyon.

Electricity

MCE offers its customers three options for energy: Light Green, Deep Green, and Local Sol. The Light Green option relies on 60 percent renewable (biomass/renewable, geothermal, eligible hydroelectric, solar and wind) and the balance from other sources (large hydroelectric, nuclear, open market purchases). Deep Green and Local Sol are 100 percent renewable, with the former 50:50 solar and wind and the latter 100 percent solar.

PG&E delivers electricity for MCE. PG&E operates approximately 18,000 circuit miles of transmission lines, approximately 107,000 circuit miles of distribution lines, 68 transmission switching stations, and 760 distribution substations. PG&E is interconnected with electric power systems in the western Electricity Coordinating Council, which includes 14 western states; Alberta and British Columbia, Canada; and parts of Mexico.

Natural Gas

PG&E provides natural gas to all or part of 39 counties in California comprising most of the northern and central portions of the State, including Solano County. PG&E charges connection and user fees for all new development and sliding use-based rates for natural gas service. PG&E operates approximately 43,300 miles of distribution pipelines and approximately 6,300 miles of backbone and local transmission pipelines, and three underground storage fields. In 2019, PG&E delivered 227 billion cubic feet of natural gas to its 4.5 million natural gas customers.

Energy Consumption

Using consumption figures provided by the United States Energy Information Administration, the proposed project's estimated building electricity and natural gas consumption is summarized in Table 6-1.

Table 6-1: Energy Consumption Estimates

Energy Source	Square Feet	Annual Consumption Rate	Annual Consumption
Electricity	2,400,000	6.6 kWh/square foot	15.8 million kWh
Natural Gas		19.4 cubic feet/square foot	46.6 million cubic feet

Notes:
'Warehouse and storage' energy consumption rate used.
Source: United States Energy Information Administration, 2016.

As shown in the table, the proposed project would demand approximately 15.8 million kWh of electricity and 46.6 million cubic feet of natural gas at buildout. All new buildings would be subject to the latest adopted edition of the California Green Building Code and Title 24 energy efficiency standards, which are among the most stringent in the United States. As such, the proposed project would not result in the unnecessary, wasteful, or inefficient use of energy.

CHAPTER 7: EFFECTS FOUND NOT TO BE SIGNIFICANT

7.1 - Introduction

This chapter, prepared in satisfaction of California Environmental Quality Act (CEQA) Guidelines Section 15128 (Effects Not Found to Be Significant), is based in part on the Notice of Preparation (NOP), dated January 12, 2021, and contained in Appendix A of this Draft Environmental Impact Report (Draft EIR). The NOP was prepared to identify the potentially significant effects of the proposed project and was circulated for public review between January 12, 2021, and February 10, 2021. In the course of this evaluation, certain impacts were found to be less than significant because the proposed project's characteristics would not create such impacts. Consistent with section 15128, this chapter provides a brief description of the reasons why effects were found not to be significant or less than significant, based on the NOP comments or more detailed analysis conducted as part of the EIR preparation process. Note that a number of impacts that are found to be less than significant are addressed in the various EIR topical sections (Sections 3.1 through 3.13) to provide more comprehensive discussion of why impacts are less than significant, in order to better inform decision-makers and the general public.

7.2 - Effects Found not to be Significant

7.2.1 - Aesthetics, Light, and Glare

State Scenic Highways

State Route (SR) 29 is located approximately 750 feet east of the project site. SR-29 is classified as an "Eligible" State Scenic Highway. Because of the project site's distance from SR-29 and the presence of intervening development, vegetation, and topography, the proposed project would have minimal visibility from the highway. Therefore, this precludes any possibility of the proposed project adversely altering views from a State Scenic Highway. No impacts would occur.

7.2.2 - Agriculture and Forest Resources

Important Farmland

The project site supports grazing land use activities. The California Department of Conservation maps the project site as "Farmland of Local Importance," which does not fall under the Important Farmland umbrella (Prime Farmland, Unique Farmland, and Farmland of Statewide Importance) as defined by CEQA Guidelines Appendix G. Two of the three project site's soils (Haire loam, 2 to 9 percent soils; and Haire clay loam, 2 to 9 percent) are not classified as prime soils by the United States Department of Agriculture, a key attribute used by the California Department of Conservation in classifying farmland. No impacts would occur.

Agricultural Zoning or Williamson Act Contracts

The project site is zoned "Industrial" by the American Canyon Zoning Ordinance, a non-agricultural zoning designation. The project site is not encumbered by any active Williamson Act contracts, which precludes the possibility of conflicts in this regard. No impacts would occur.

Forest Zoning

The project site is zoned "Industrial" by the American Canyon Zoning Ordinance, a non-forest zoning designation. No impacts would occur.

Timberland

The project site contains undeveloped land. There are no stands of commercially harvestable trees and, thus, the proposed project would not convert forestland to non-forest use. No impacts would occur.

Pressures to Convert Agricultural or Timberland

The project site is currently within the American Canyon city limits and designated for urban development by the City of American Canyon General Plan (General Plan); thus, it is considered committed to urban use within the foreseeable future. The surrounding land is also within the American Canyon city limits and designated for urban development by the General Plan. Thus, it is also committed to urban use. This condition precludes the possibility of the proposed project creating pressures to convert farmland to non-agricultural use. As noted above, moreover, the project site does not qualify as "Important Farmland" as that term is used by the State of California. No impacts would occur.

7.2.3 - Biological Resources

Conservation Plans

The project site is not within the boundaries of an adopted habitat conservation plan or natural community conservation plan. This condition precludes the possibility of the proposed project conflicting with such a plan. No impacts would occur.

7.2.4 - Geology, Soils, and Seismicity

Septic or Alternative Wastewater Disposal Systems

The proposed project would be served with sanitary sewer service provided by the City of American Canyon. No septic or alternative wastewater disposal system would be employed. This condition precludes the possibility of related impacts. No impacts would occur.

7.2.5 - Hazards and Hazardous Materials

Exposure of Schools to Hazardous Materials

Calvary Baptist Church School, the closest school to the project site, is located 0.65 mile to the south. This distance precludes the possibility of the proposed project exposing schools located within 0.25 mile of the site to hazardous materials or hazardous air emissions. No impact would occur.

Wildland Fires

The project site contains undeveloped land and is surrounded by urban development within the American Canyon city limits. The project site is not located within a "high" or "very high" fire hazard severity zone as identified by the California Department of Forestry and Fire Protection (CAL FIRE). The site also lacks the kind of vegetation associated with wildland fires. For these reasons, the

project site is not susceptible to wildland fires. In addition, the proposed project would have multiple connections to Green Island Road and the future Devlin Road, so that adequate emergency response and evacuation routes would be available in the event of a fire-related emergency. These conditions and circumstances preclude the possibility of the proposed project exposing people or structures to a significant risk of loss, injury, or death involving wildland fires. No impacts would occur.

7.2.6 - Hydrology and Water Quality

100-Year Flood Hazards

The project site is not within a 100-year flood hazard zone. This condition precludes the possibility of the proposed project exposing people or structures to 100-year flood hazards. No impacts would occur.

Levee or Dam Failure

Exhibit 15 of the General Plan indicates that the western portion of the project site is within the dam failure inundation area of Conn Dam, Milliken Dam, and Rector Reservoir. The western portion of the project site is proposed as a wetland preserve and retention basin and, thus, inundation by floodwaters would not pose a risk to public safety. Moreover, dam failure is considered remote and unlikely due to regular monitoring of the structural integrity of these facilities. Additionally, the project site is not protected by any levees, which precludes the potential for inundation by levee failure. No impacts would occur.

Seiches, Tsunamis, or Mudflows

There are no large inland bodies of water such as lakes or reservoirs near the project site, a condition that precludes seiche inundation. The project site is located more than 30 miles from the Pacific Ocean and more than 1 mile from the Napa River, a condition that precludes tsunami inundation. The project site is not located in a volcanically active area or at the base of a mountain range, a condition that precludes mudflow inundation. No impacts would occur.

7.2.7 - Land Use

Division of an Established Community

The project site currently does not contain any occupied dwelling units and is surrounded with a barbed wire fence intended to deter trespassing. Thus, it does not contain any established communities or serve as a linkage between established communities. This condition precludes the division of an established community. No impacts would occur.

7.2.8 - Mineral Resources

Mineral Resources of Statewide or Local Importance

The project site does not support mineral resource extraction operations. Neither the California Department of Conservation nor the General Plan designates the site a location of known mineral deposits. In addition, the California Department of Conservation Geologic Energy Management

Division indicates no existing or plugged gas or oil wells on the project site. This condition precludes the possibility of a loss of mineral resources of Statewide or local importance. No impacts would occur.

7.2.9 - Population and Housing

Growth Inducement

Please refer to Chapter 6, Other CEQA Considerations, Section 6.2 for discussion of growth inducement.

Displacement of Persons or Dwelling Units

The project site does not contain any existing dwelling units. This condition precludes the possibility of displacement of persons or dwelling units. No impacts would occur.

7.2.10 - Public Services

Schools

The proposed project is nonresidential in nature and would not directly induce population growth and, therefore, would not increase demand for schools such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

Parks

The proposed project is nonresidential in nature and would not directly induce population growth and therefore would not increase demand for park facilities such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

Other Public Facilities

The proposed project is nonresidential in nature and would not directly induce population growth and therefore would not increase demand for public facilities, such as libraries, such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

7.2.11 - Recreation

Physical Deterioration of Recreational Facilities

The proposed project is nonresidential in nature and would not directly induce population growth and therefore would not increase the demand for recreational facilities such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

7.2.12 - Wildfire

Emergency Response or Evacuation

The project site contains undeveloped land and is surrounded by urban development within the American Canyon city limits. The project site is not within a State responsibility area or classified as a very high fire hazard severity zone. As such, the project site is not susceptible to wildfires. Regardless, the proposed project would have multiple connections to Green Island Road and the future Devlin Road. As such, adequate emergency response and evacuation routes would be available in the event of an emergency. No impact would occur.

Exposure to Wildfire

The project site contains undeveloped land and is surrounded by urban development within the American Canyon city limits. The project site is not within a State responsibility area or classified as a very high fire hazard severity zone. As such, the project site is not susceptible to wildfires. Thus, persons or structures would not be exposed to wildfire hazards. No impact would occur.

Fire Infrastructure

The project site contains undeveloped land and is surrounded by urban development within the American Canyon city limits. The project site is not within a State responsibility area or classified as a very high fire hazard severity zone. As such, the project site is not susceptible to wildfires. Thus, no wildfire suppression infrastructure would be required. No impact would occur.

Post-Fire Flooding or Landslides

The project site contains flat, undeveloped land and is surrounded by urban development within the American Canyon city limits. The project site is not within a State responsibility area or classified as a very high fire hazard severity zone. As such, the project site is not susceptible to wildfires and, thus, it would not be susceptible to post-fire flooding or landslides. No impact would occur.

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CHAPTER 8: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

8.1 - Lead Agency

8.1.1 - City of American Canyon

Community Development Department

Community Development Director ..... Brent Cooper, AICP

Public Works Department

Public Works Director ..... Erica Ahmann Smithies
Engineer III ..... Edison Bisnar

8.1.2 - Public Agencies

State Agencies

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Chief, Transportation and Toxics Division ..... Heather Arias

California Department of Fish and Wildlife

Regional Manager, Bay Delta Region ..... Greg Erickson

Native American Heritage Commission

Analyst ..... Nancy Gonzalez-Lopez

Local Agencies

American Canyon Fire Protection District

Fire Chief ..... Mike Cahill

County of Napa

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City of American Canyon
Active Community Development Projects
June 2022

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
1.	Hotel @ The Ruins (PL22-0012)	McGrath Properties American Canyon, LLC	A proposed hotel at the Watson Ranch Ruins & Gardens with up to 200 hotel rooms, conference facilities and event venues.	Southeast corner Rolling Hills/Rio Del Mar 19.8 acres	5/16/22 Application submitted 6/13/22 Comments to applicant	William He
2.	Residences at Napa Junction (PL22-0011)	American Canyon Ventures LLC	453 multi-family rental dwellings with associated parking and amenities.	1000 Reliant Way 15 acres	5/2/22 Application submitted 6/1/22 Comments to applicant	William He
3.	Carwash Preapplication (PL22-0010)	Blackpoint Properties	Preapplication to answer due diligence questions for a potential drive-thru fast food restaurant or carwash	3885 Broadway 1.01 acres	4/18/22 Application submitted 5/5/22 Comments to applicant	William He
4.	Home2Suites Major Modification (PL22-0007)	Napa Valley Hospitality, LLC	Proposal to modify underground overhead utility condition of approval	3701 Main Street 2 acres	3/29/22 Application submitted 5/11/22 Comments to applicant 6/23/22 Scheduled for PC Review	William He
5.	Napa Cove Lot Line Adjustment (PL22-0003)	CRP Affordable Housing	Merge 3 parcels into one parcel for multifamily residential apartment purposes.	3805 Broadway 3.48 acres	3/2/22 Application submitted 4/25/22 Comments to applicant 4/27/22 Comments to applicant 6/9/22 Application approved	William He

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
6.	Napa Logistics Park Road improvement mitigation amendment (PL21-0033)	Orchard Partners	Revise the Napa Logistics Improvement Agreement to match "as-built" traffic impacts with roadway improvements	South of Napa Airport	11/15/21 Application submitted 1/18/22 Applicant preparing CEQA document 5/26/22 Application resubmittal	Brent Cooper
7.	Fume Cannabis CUP Modification (PL21-0029)	American Canyon Delivery LLC	Add a separate company to conduct the delivery component to the Fume CUP	180 Klamath Court	10/19/21 Application submitted 12/2/21 Comments to applicant 3/15/22 Applicant response to comments 5/1/22 Awaiting background check results 6/21 22 Application approved	Brent Cooper
8.	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 12/1/21 Applicant on 6 month hold	William He
9.	Giovannoni Logistics Center (PL20-0042, PL20-0043)	Buzz Oates Construction	Design Permit, Tentative Map and 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 5/20/22 Draft EIR Public review period starts	Brent Cooper
10.	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 1/28/21 PC Review continued to 2/25 2/25/21 PC Approved 3/5/21 Appeal Received 7/20/21 City Council appeal continued 2/10/22 Council approved applicant 6-month continuation request to 9/7/22	William He

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
11.	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 9/20/21 Applicant confirmed Hold status	Brent Cooper
12.	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 9/20/21 Applicant confirmed Hold status	Brent Cooper

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
1. Napa Cove Improvement Plans and Grading (DV22-0001)	Grading and Improvement plans for the Napa Cove Apartment project.	3787 Broadway	3.48 acres	1/18/22 Application submitted 2/4/22 First Plan check 3/21/22 Grading permit approved	Edison Bisnar
2. Napa Cove Building Permits (BP22-0017, 0018, 0019)	Building Permits for the Napa Cove Apartment Project	3787 Broadway	3.48 acres	1/19/22 Application submitted 2/1/22 First Plan check 3/21/22 Permits issued	Tom Trimberger
3. PG&E Regional Center Improvement Plans (DV21-0018)	Improvement plans for the PG&E Regional Center	500 Boone Drive	24.5 acres	10/19/21 Application submitted 12/01/21 First Plan Check 01/13/22 Second Plan Check 02/14/22 Third Plan Check	Edison Bisnar
4. Watson Ranch Lot 10 Rough grading and Subdivision Improvement Plans (DV21-0014, 0015)	Rough grading and site improvements for WRSP Lot 10	Northeast corner Marcus Road/Rio Del Mar East	27.17 acres	11/08/21 Application submitted 12/08/21 First Plan Check 01/03/22 Second Submittal 01/13/22 Second Plan Check 01/21/22 Third Submittal 1/24/22 Rough Grading Permit approved	Edison Bisnar
5. Watson Ranch Lot 10 Model Home Building Permits (BP21-0522, 0523)	Model Homes for Watson Ranch Lot 10	Northeast corner Marcus Road/Rio Del Mar East	27.17 acres	12/02/21 Application submitted 12/20/21 First Plan Check 02/10/22 Second Submittal	Tom Trimberger
6. Lemos Pointe Building Permit (BP21-0291 – BP21-0298	186 modular affordable apartment units	Northwest corner Marcus Road/Rio Del Mar East	6.7 acres	6/28/21 Application submitted 11/23/21 Building Permits issued	Tom Trimberger
7. 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

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
8. Watson Ranch Lot 14/15 Grading and Improvement Plans (DV21-0012, 0013)	Rough grading and site improvements for WRSP Lot 14/15.	Northern terminus of Summerwood	11.97 acres	08/25/21 Application submitted 10/08/21 First Plan Check 10/29/21 Second Submittal 11/15/21 Rough Grading Permit approved 5/13/22 Improvement Plan approved	Edison Bisnar
9. Watson Ranch Lot 14/15 Model Home Building Permits (BP21-0513, 0514, 0515)	Model Homes for Watson Ranch Lot 14/15.	Northern terminus of Summerwood	11.97 acres	11/30/21 Application submitted 5/4/22 Permits approved 6/22/22 Permit issuance anticipated	Tom Trimberger
10. Napa Junction III Building 6B North Bay Urgent Care (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 6/7/22 Ribbon cutting ceremony	William He
11. Napa Junction III Building 6B North Bay Urgent Care (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 6/7/22 Ribbon cutting ceremony	Edison Bisnar
12. 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**
13. 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
14. 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
15. Home2Suites Will Serve and Improvement Plan (DV19-0015)	Will serve application and improvement plans for a 102-room hotel.	3701 Main Street	2.0 acres	9/5/19 Will Serve Application submitted 5/25/20 Improvement Plan Application submitted 3/15/21 5th Submittal received. 6/10/21 DV approved. 7/9/21 Fee Reduction Request Received 8/19/21 Comments to applicant 9/16/21 and 10/7/21 Applicant submittal 4/5/22 Council approved fee reimbursement request	Edison Bisnar Brent Cooper

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
16. Home2Suites Building Permit (BP19-0499)	Building permit for 102 room hotel.	3701 Main Street	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. 5/1/22 Applicant clearing conditions of approval	Interwest
17. Circle K and Fuel station Improvement Plans (DV20-0003)	STEM, LLC	Improvement plans for a new Circle K fuel station and convenience store.	112 Lombard 2.25 acres	4/13/20 Application submitted 10/4/21 Grading permit approved	Edison Bisnar
18. Circle K Fuel Station Building Permit (BP20-0457, BP20-0458)	STEM, LLC	New Circle K fuel station and convenience store.	112 Lombard 2.25 acres	10/14/20 Application submitted 10/25/21 Convenience store building permit issued 10/26/21 Gas Station canopy building permit issued	Interwest
19. PG&E Regional Center Improvement Plans (DV21-0018)	Turner Construction	Improvement plans for the PG&E Regional Center	500 Boone 11.96 acres	10/19/21 Application submitted	Edison Bisnar
20. Single Family Home Improvement Plans (DV21-0019)	Hoi Wong	Improvement plan for a new single-family home.	219 Rio Del Mar	11/17/21 Application submitted 5/12/22 2nd Plan Check comments	Edison Bisnar

Major City-Initiated Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff**
1. 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) 1/13/22 Consultant is preparing a modified scope to prepare a 2-stage update with a "fast-track" technical update 4/19/22 City Council NOP review (continued) 6/7/22 City Council NOP review	Brent Cooper
2. 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. 5/16/22 Annexation efforts returned to City initiated. Consultant preparing CEQA scope documents.	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. 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
3. Napa Valley Transportation Authority Highway 29 PID Study	Project Initiation Document (PID) for Highway 29 through American Canyon	American Canyon	N/A	10/4/21 NVTA and American Canyon workshop 2/16/22 NVTA Board of Directors voted to remove the six-lane option from future study.	Kate Miller