



**REGULAR PLANNING COMMISSION
MEETING AGENDA**
City Hall - Council Chambers
4381 Broadway, Ste. 201, American Canyon
December 16, 2021
6:30 PM

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

AMENDED AGENDA

Item 3, Napa Cove Design Permit has been amended as follows:

1. Replaced Attachment 1 with "Napa Cove PC Resolution rev 3", which has updated Public Works conditions
2. Replaced Attachment 9 with "Napa Cove Arch Renderings rev 2", which has the updated tan color for the apartment renderings
3. Corrected a typo in the body of the Background and Analysis to read: "The project includes 3,403 square feet of common open space, 123 parking spaces, 40 bicycle parking spaces, and 1.03-acres of landscaping."

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

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

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

Zoom Meeting Link: [Click here](#)

Webinar ID: 883 6941 0180 **Passcode:** 348355

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 Commissioners at that time. eComments will remain open throughout the meeting, and all comments received will be posted online and become part of the meeting record.

The above-identified measures exceed all legal requirements for participation in public comment,

including those imposed by the Ralph M. Brown Act. For more information, please call the Office of the City Clerk at (707) 647-4369 or email cityclerk@cityofamericancanyon.org.

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

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

6:30 P.M. REGULAR MEETING

CALL TO ORDER

PLEDGE

ROLL CALL

PUBLIC COMMENT

*This time is reserved for members of the public to address the 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

- 1. Minutes of October 28, 2021**
Recommendation: Approve [Minutes](#) of October 28, 2021 Planning Commission meeting.
- 2. [2022 Planning Commission Meeting Calendar](#)**
Recommendation: Review and approve the Planning Commission [Calendar](#) of regular meetings for 2022.

PUBLIC HEARINGS

3. Napa Cove Design Permit

Recommendation: Adopt a [Resolution](#) for approval of a Design Permit for development of 66 affordable dwelling units distributed over 3 two and three-story buildings in a 3.47-acre site within the Broadway Residential zoning district, APNs 058-362-005, -016, and -027 (File Number PL21-0027)

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

Recommendation: A [Resolution](#) of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon adopt an Ordinance to amend the American Canyon Municipal Code Chapter 19.04 Definitions; Chapter 19.05 Commercial Classifications; Chapter 19.11 Commercial Zoning District; Chapter 19.49 Nonconforming Uses, Structures and Lots; and Broadway District Specific Plan Table 2-3 Permitted Uses to prohibit new and expanded service stations in the City of American Canyon that engage in the retail sale of motor vehicle fossil fuels (PL21-0028).

MANAGEMENT AND STAFF ORAL REPORTS

5. Active Planning Projects

Recommendation: Review [Active Planning Projects](#) List.

COMMISSIONER ITEMS

ADJOURNMENT

CERTIFICATION

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

Nicolle Jones, Administrative Technician

**CITY OF AMERICAN CANYON
PLANNING COMMISSION BOARD MEETING**

**ACTION MINUTES
October 28, 2021**

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

6:30 P.M. REGULAR MEETING

CALL TO ORDER

Meeting called to order at 6:32 PM

PLEDGE

ROLL CALL

Present: Commissioners Eric Altman, Andrew Goff, Tammy Wong, Chair Tyrone Navarro

Absent: Vice Chair Crystal Mallare

PUBLIC COMMENT

Written Comments:

None

Oral Comments:

None

AGENDA CHANGES

None

Disclosures of ex parte Communications:

Commissioner Wong disclosed that she had a conversations Rick Hess of R.H. Hess Development and Patrick Band of the Napa Valley Bicycle Coalition about the Hampton Inn project.

Commissioner Altman disclosed that he had a conversation with Rick Hess of R.H. Hess Development regarding the Hampton Inn project.

CONSENT CALENDAR

1. Minutes of September 30, 2021

Approve Minutes of September 30, 2021 Planning Commission meeting.

2. PG&E Design Permit Resolution Modified Language

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

Action: Moved by Commissioner Wong, second by Commissioner Goff and carried by a vote of 4 – 0 with Vice Chair Mallare being absent, to approve consent calendar with the correction to item 12 in Resolution 2021-19 to add the word “water” after “recycled” so that it reads “irrigation shall incorporate the use of recycled water, if feasible” ...

PUBLIC HEARINGS

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

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

Community Development Director Brent Cooper presented a PowerPoint Presentation.

Commissioners discussed the item.

Speakers:

City Attorney William Ross

Chair Navarro opened the Public Hearing.

Written Comments:

Melanie Marshall

Oral Comments:

Lori Stelling, Napa Climate Now

Chris James

Chair Navarro closed the public hearing.

Commissioners discussed the item.

Chair Navarro reopened the Public Hearing.

Written Comments:

None

Oral Comments:

Rick Hess, R H Hess Development

Jim Wilson

Chair Navarro closed the Public Hearing.

Action:

Moved by Commissioner Wong, second by Commissioner Altman and carried by a vote of 4 – 0 with Vice Chair Mallare being absent to continue the item to the next regularly scheduled Planning Commission meeting in order to accommodate updates to the Ordinance to make the non-conforming period 6 months, which is consistent with other uses in the City and to also look at adding language related to common law and force majeure to cover other extenuating circumstances.

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

Action: Consider three Resolutions:

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

Associate Planner William He presented a PowerPoint Presentation.

Speakers:

Al Shaghaghi, Applicant

Pinu Patel, Applicant

Commissioners discussed the item.

Chair Navarro opened the Public Hearing.

Written Public Comments:

Valerie Zizak-Morais

Melanie Marshall

Oral Public Comments:

Patrick Band, Napa Valley Bicycle Coalition

Chris James

Chair Navarro closed the Public Hearing.

Speakers:

Brent Cooper, Community Development Director

Edison Bisnar, Public Works Engineer III

Paul Wade, Coastland Civil Engineers

Al Shaghaghi, Applicant

Jeff MacAdam, on behalf of the applicant

Bill Ross, City Attorney

Commissioners Discussed the item.

Chair Navarro reopened the Public Hearing.

Written Comments:

None

Oral Comments:

Patrick Band, Napa Valley Bicycle Coalition

Chair Navarro closed the Public Hearing.

Commissioners discussed the item.

Speakers:

Brent Cooper, Community Development Director

Pinu Patel

Al Shaghaghi

Jeff MacAdam

James Heilbranner

Action:

Moved by Commissioner Altman, second by Commissioner Wong and approved by a vote of 4 – 0 with Vice Chair Mallare being absent to approve Resolution number 2021-20 recommending the City Council of the City of American Canyon: 1) adopt an Addendum to the Broadway District Specific Plan Program Environmental Impact Report for the Hampton Inn Project: consisting of an amendment to the Broadway District Local Serving Mixed Use Zoning District and Conditional Use Permit for a 106-room Hampton Inn Hotel on a 2.53-acre parcel at 3443 Broadway Street; and 2) direct staff to file a Notice of Determination.

Moved by Commissioner Goff, second by Commissioner Altman and carried by a vote of 5-0 with Vice Chair Mallare being absent to Adopt Resolution number 2021-21 of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve an amendment to the Broadway District Specific Plan Table 2-3 to permit Lodging as a Conditionally Permitted Use in the Local Serving Mixed Use Zoning District (LSMU) Zoning District and add a new Special Development Requirement No. 3 to require Lodging Uses in the LSMU Zoning District qualify for a minimum three Star Forbes Travel Guide Rating (File No. PL20-0030);

Moved by Commissioner Wong, second by Commissioner Altman and carried by a vote of 5-0 with Vice Chair Mallare being absent to adopt the modified Resolution number 2021-22 of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve a Conditional Use Permit for a 112-room Hampton Inn hotel on a 2.53-acre parcel at 3443 Broadway St, APN 058-312-010 (File No. PL20-0029)

MANAGEMENT AND STAFF ORAL REPORTS

5. Active Planning Projects

Action: [Review Active Planning Projects List](#)

Community Development Director Brent Cooper reported on Active Planning projects, including the Residences at Napa Junction pre-application, Napa Cove design permit, PG&E Regional Center landscape plan, Givannoni Logistics Park, Fume Cannabis, and Circle K construction.

COMMISSIONER ITEMS

Commissioners reported on items of interest.

ADJOURNMENT

Meeting adjourned 10:01

CERTIFICATION

Respectfully Submitted,

Nicolle Jones, Administrative Technician



TITLE

2022 Planning Commission Meeting Calendar

RECOMMENDATION

Review and approve the Planning Commission [Calendar](#) of regular meetings for 2022.

CONTACT

Nicolle Jones, Administrative Technician

BACKGROUND & ANALYSIS

The Planning Commission's established regular meeting schedule is at 6:30 p.m. on the fourth Thursday of each month. The November meeting is proposed one week earlier than the regular schedule in order to avoid conflict with a regular holiday. Meetings held on other dates are considered special meetings.

The proposed calendar lists all the regular meetings for the Planning Commission in 2022. Adoption of a 2022 calendar of regular and special meetings does not prevent the Planning Commission from calling additional special meetings throughout the year or canceling meetings when necessary.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Not applicable.

FISCAL IMPACT

None.

ENVIRONMENTAL REVIEW

None

ATTACHMENTS:

[Calendar Year 2022 Planning Commission Regular Meeting Dates](#)



Calendar Year 2022

Regular Planning Commission Tentative Meeting Dates

January 27, 2022

February 24, 2022

March 24, 2022

April 28, 2022

May 26, 2022

June 23, 2022

July 28, 2022

August 25, 2022

September 22, 2022

October 27, 2022

**November 17, 2022

December 22, 2022

**Special date due to Thanksgiving Holiday



TITLE

Napa Cove Design Permit

RECOMMENDATION

Adopt a [Resolution](#) for approval of a Design Permit for development of 66 affordable dwelling units distributed over 3 two and three-story buildings in a 3.47-acre site within the Broadway Residential zoning district, APNs 058-362-005, -016, and -027 (File Number PL21-0027)

CONTACT

William He, AICP, Associate Planner

BACKGROUND & ANALYSIS

Site Information

General Plan Information	Broadway Residential (BR)
Zoning District	Broadway Residential (BR)
Site Size	3.47 acres
Surrounding Zoning Uses	North: Broadway Residential (BR) / Vacant site and Canyon Café South: Broadway Residential (BR) / Melvin Park Tennis Courts and Mosquito Abatement facility East: Downtown Core (DC) / Fairfield Inn and Laso Restaurant West: Residential Rural 20,000 (RR10,000 and RR20,000) / single-family residences and Vacant site owned by City
Access	Melvin Rd

Proposed Development

CRP Affordable proposes a 66-unit, two and three-story multifamily development at the vacant site approximately at 3805 Broadway St. The proposed site is a 3.47-acre site composed of three parcels located on the west side of Broadway, north of the Melvin Rd Tennis Courts and Mosquito Abatement facility. The project includes 3,403 square feet of common open space, 123 parking

spaces, 40 bicycle parking spaces, and 1.03-acres of landscaping. The 66 units consist of 16 one-bedroom units at 638 square feet, 32 two-bedroom units at 891 square feet, and 18 three-bedroom units at 1,105 square feet. The site amenities include a children’s playground and a community building that includes rental office and a computer lab. The project plans are shown in Attachment 2.

The Napa Cove project is proposed in the Broadway Residential (BR) zoning district within the Broadway District Specific Plan (BDSP) area. The project includes an Addendum to the BDSP Program Environmental Impact Report (BDSP PEIR), as shown in Attachment 3. A map depicting the proposed project location is included as Attachment 4.

Current Site Conditions

The proposed Napa Cove site is located on a vacant site within the Broadway District. According to the BDSP chapter 2, the Broadway Residential (BR) zoning district is designed to accommodate single and multi-family “missing middle” residential uses in areas of minimal constraints and ready access to transportation services. The site is relatively flat and accessible from Melvin Road.

The BR zoning district permits multifamily development by right, and the site had garnered interest from housing developers in the past. For example:

- May 2017, DBIC proposed market rate 91 units in a single building as a pre-application.
- April 2020, the Broadway Apartments proposed 97 affordable units in four buildings as a pre-application.

Analysis of Land Use Issues

Affordable Housing: The Napa Cove project consists of 66 affordable apartment units. Apartment sizes range from 1 – 3 bedroom units. The applicant is fortunate to be awarded Low Income Housing Tax Credit (LIHTC) funding for the project. Housing unit affordability will consist of the following:

- 13 units at or below 30% area medium income (AMI)
- 13 units at or below 40% AMI
- 39 units at or below 60% AMI
- 1 manager unit (non-revenue)

A chart depicting proposed rents by bedroom size is included as Attachment 5. The applicant will work Napa Housing Authority for an affordable housing agreement prior to building permit issuance.

Broadway Site Access: The Napa Cove project will take access from Melvin Road with an emergency access off Broadway. Initially, the project included a vehicle access off Broadway. The Broadway District Specific Plan (BDSP) discourages new driveway accesses onto Broadway to facilitate safe and efficient traffic flow. It also leads to a safer bicycle and pedestrian environment because there will be fewer conflicts with vehicles crossing the sidewalk and bike paths to enter and

exit the property.

The Napa Valley Transportation Authority (NVTa) reviewed the project and requested removal of the vehicular access to Broadway because the new driveway would disrupt roadway operations and complicate safety and design elements, such as future Class I and IV bicycle facilities and transit stops and transit passenger amenities. The NVTa letter is included as Attachment 6.

Melvin Road Site Access: The Napa Cove property does not have Melvin Road frontage, but does have an access easement to Melvin Road across a vacant City-owned parcel designated as a Park in the BDSP. This parcel is located west of the project site off Melvin, immediately north of Melvin Park. See location map, Attachment 4.

A driveway on the City-owned Melvin Park property is located immediately south of and parallel to the Napa Cove access easement. This driveway also provides access to the Mosquito Abatement District. Constructing a Napa Cove driveway immediately parallel and adjacent to the Melvin Park driveway seemed an inefficient use of land and expense. Instead, staff proposed, and the applicant agreed to use the Melvin Park driveway for their access. A condition of approval requires the Napa Cove project to enter into an agreement with the City to acquire an access easement on Melvin Park and pay its fair share of Melvin Park driveway maintenance in perpetuity.

Proposed Parking Reduction: In accordance with State Law, projects that provide affordable housing are entitled to a significant reduction from the City's parking requirements. Applying the parking code to the Napa Cove project leads to a 141-parking space requirement. Using the State Law parking reduction, when the project had a Broadway vehicle access, the applicant proposed 84 parking spaces (a reduction of 57 spaces). Tenant "overflow" parking was proposed on Melvin Road, which is not desirable for new tenants, and existing residents. Furthermore, the BDSP acknowledges that Melvin Road needs traffic calming. Therefore, the prospect of on street parking use is not ideal.

Fortunately, the site plan change that eliminated the Broadway vehicle driveway "frees up" property for an additional 17 parking spaces on the Napa Cove site. This site plan revision increases parking from 84 spaces to 101 spaces.

A second site plan change to use the existing Melvin Park driveway "frees up" property within the existing vehicle access easement and Napa Cove site for additional parking. This site plan revision yields a parking increase from 103 spaces to 123 spaces (an additional 22 parking spaces).

With efficiencies gained from site plan changes, the project, while still less than the parking code, will provide 39 more parking spaces than initially proposed. See discussion of Affordable Housing Concessions and Incentives below.

Affordable Housing Concessions and Incentives: The project includes several concession requests

for development standards. The applicant requested the following:

1. Reduced Parking Requirements
 - a. Reduce the required parking from 141 parking spaces to 123 parking spaces.
 - b. Reduce the required number of covered parking spaces from 66 to 45 covered spaces.
2. Reduced Building Separation Requirement
 - a. Reduce the required building separation from 35 feet to 30 feet and 2 inches.
3. Reduced areas for Balconies and Patios
 - a. Reduce open patios from 8 feet to 5 feet in depth.
 - b. Reduce balconies from 6 feet to 5 feet in depth.

The concessions can be approved by the Planning Commission in accordance to ACMC Section 19.28.060, "City Assistance" and is consistent with the State Density Bonus Law. The concessions do not impact the building and safety standards. The applicant's letter of justification is included as Attachment 7.

Architecture: The Napa Cove project consists of three multifamily residential buildings at approximately 34 feet in height, varying among two and three-story buildings. The buildings provide a "Modern Industrial" aesthetic, which is derived from re-appropriating traditional industrial materials at a more residential scale. According to the architect's narrative, the buildings contain a stucco chassis with a warm grey color with a medium sand finish. The central spines of the buildings are clad in grey brick that distinguishes entry and exit points. There is a secondary accent material, a fiber-cement board colored in "brushwork red", that symbolizes the traditional red hues of brick used in more industrial settings. The architect's description is included as Attachment 8. A color rendering of the apartments is included as Attachment 9.

The BDSP Design Chapter discusses the color palette consisting of subtle colors with a vibrant accent color. The proposed Napa Cove Brushwork Red and grey brick colors are appropriate accent colors.

However, the stucco color is "warm grey." On the pdf copies of the color elevations, however, the "warm grey" appears pink. The use of grey as a predominant stucco wall color is a departure. Most buildings in the BDSP have a stucco or primary color as a tan with light brown, sometimes sage or similar green color accents. The Home2Suites hotel, which will be constructed across Broadway, just north of the Napa Cove project pairs a similar red and grey accent color with a light tan Sherwin Williams 7517 color stucco. To improve Napa Cove compatibility with nearby buildings in the BDSP, staff suggests substituting the "warm grey" stucco color for a tan color similar to Sherwin Williams 7517. A condition of approval would require the applicant to substitute the warm grey stucco color with a tan color similar to Sherwin Williams 7517.

Lot Line Adjustment: Today, the Napa Cove project site consists of three parcels. The proposed project includes apartments on two parcels and a portion of a third parcel.

Because parcels can be sold, it is important for the apartment project to be located on a single

parcel so land ownership remains under a single owner/corporate entity. To keep the apartment project on a single parcel, a lot line adjustment (LLA) is necessary to merge all three parcels into one. A condition of approval requires the three existing lots to be merged into a single parcel through a Lot Line Adjustment application.

Proposed “Open Space” lot: The southern portion of the project site is labeled “Open Space.” This property has a Broadway Residential zoning district designation. The Broadway Residential zoning district allows multifamily housing, but also mixed use (i.e.: commercial and residential in the same building), townhomes, other uses.

According to the applicant, the “Open Space” property at some point in the future will be developed for a use consistent with the Broadway Residential zoning. Because the “Open Space” lot measures only 0.48 acres, it does not meet the 1.0-acre minimum Broadway Residential site size. For this reason, the “Open Space” lot cannot be “carved out” as a separate parcel from the Napa Cove project.

Overhead Utility Undergrounding: The BDSP requires overhead utilities on-site and along property frontage to be placed underground in conjunction with the development of the site. The site has three utility poles with overhead wires across the Broadway frontage and two on-site utility poles.

A graphic depicting the overhead utility poles is included as Attachment 10. A condition of approval has been included in the draft resolution that requires the utility poles and associated wires to be undergrounded or removed prior to release of improvement plan security.

Outreach: The applicant conducted their own public outreach to property owners within the vicinity in on September 20, 2021 and received no comments. Staff sent a neighborhood letter on November 3, 2021 and received no comments. In preparation for the Planning Commission meeting, staff sent out an official public notice on December 3, 2021 and has not received any comments.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

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

FISCAL IMPACT

The Napa Cove project required a developer’s deposit from the Applicant for review and processing, so there is no fiscal impact for staff’s time. If the Planning Commission recommends the project, the applicant will develop a new multi-family development in the City. The project can activate an underutilized parcel, bring 66 affordable housing to the City, and bring additional customers to City stores and restaurants.

ENVIRONMENTAL REVIEW

The 2019 Broadway District Specific Plan (BDSP) Program Environmental Impact Report (PEIR) (SCH #2017042025) evaluated the development of the 292-acre site area along the Broadway corridor.

The City made findings of overriding consideration for significant and unavoidable impacts. Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), an Addendum to the BDSP PEIR was prepared to evaluate the proposed project, as only some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. The proposed Napa Cove project site and the amount of development are consistent with the PEIR.

ATTACHMENTS:

1. Napa Cove - PC Resolution
2. Napa Cove Plans
3. Napa Cove BDSP EIR Addendum with Appendices
4. Napa Cove Location Map
5. Napa Cove Apts Rents by Bedroom Size
6. NVTAs letter AmCan Napa Cove
7. Napa Cove Letter of Justification
8. Napa Cove Architectural Narrative
9. Napa Cove Architectural Renderings
10. Napa Cove Utility Pole Locations

RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, APPROVING A DESIGN PERMIT FOR DEVELOPMENT OF 66 AFFORDABLE DWELLING UNITS DISTRIBUTED OVER 3 TWO AND THREE-STORY BUILDINGS ON A 3.47-ACRE SITE WITHIN THE BROADWAY RESIDENTIAL ZONING DISTRICT, APNS 058-362-005, -016, AND -027 (FILE NO. PL21-0027)

WHEREAS, on October 1, 2021, CRP Affordable filed a Design Permit application (File No. PL21-0011) for development of 66 affordable dwelling units distributed over 3 three-story buildings in a 3.47-acre site within the Broadway Residential (RB) zoning district, APNs 058-362-005, -016, and -027; and

WHEREAS, the project will be supported with 123 parking spaces, 3,403 SF of common open space, and 1.03-acres of landscaping; and

WHEREAS, the project includes affordable housing development concessions that include reduced building separation setbacks, parking, and balcony and patio sizes; and

WHEREAS, in accordance to the American Canyon Municipal Code (ACMC) Section 19.28.060, the approval body of an affordable housing development can approve development concessions; and

WHEREAS, on November 8, 2021, an Addendum to the Broadway District Specific Plan Program Environmental Impact Report (BDSP PEIR) was prepared and evaluated on the proposed multifamily housing development; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on December 16, 2021 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal; and

WHEREAS, the Planning Commission considered all of the written and oral testimony presented at the public hearing in making its decision on December 16, 2021; and

NOW THEREFORE BE IT RESOLVED that the American Canyon Planning Commission hereby makes the following CEQA findings and Design Permit findings set out in Sections 1 and 2 to approve Design Permit PL21-0027 for the Project, subject to the conditions of approval set out in Section 3.

SECTION 1: CEQA FINDINGS

The 2019 Broadway District Specific Plan (BDSP) Environmental Impact Report (EIR) evaluated the development of the 292-acre site area along the Broadway corridor. The City made findings of overriding consideration for significant and unavoidable impacts. Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), an Addendum to the BDSP PEIR was prepared to evaluate the proposed Zone Change and Development to evaluate the proposed project. The Addendum demonstrates that the BDSP PEIR contemplated impacts and mitigation measures sufficiently address the proposed zone change and Hampton Inn project. No new mitigation measures are required. Thus, an Addendum to the BDSP PEIR is appropriate for this application.

SECTION 2: DESIGN PERMIT FINDINGS

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

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

The proposed multifamily development complies with the height and bulk regulations that apply to the project site.

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

The site and design of the project includes the following concessions in development standards:

1. *Reduced Parking Requirements*
 - a. *Reduce the required parking from 141 parking spaces to 123 parking spaces.*
 - b. *Reduce the required number of covered parking spaces from 66 to 45 covered spaces.*
2. *Reduced Building Separation Requirement*
 - a. *Reduce the required building separation from 35 feet to 30 feet and 2 inches.*
3. *Reduced areas for Balconies and Patios*
 - a. *Reduce open patios from 8 feet to 5 feet in depth.*
 - b. *Reduce balconies from 6 feet to 5 feet in depth.*

The concessions are approved by the Planning Commission in accordance to ACMC Section 19.28.060, "City Assistance". Besides the identified concessions, the architectural design of the two- and three-story apartment buildings reflects the Broadway District Specific Plan (BDSP) Design Guidelines.

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

The General Plan designated the design standards to the Broadway District Specific Plan. As discussed in Section B above, the project complies with the BDSP Design Guidelines.

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

The project is within the E-zone of the Airport Land Use Compatibility plan and multifamily dwellings are permitted within the zone.

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

The new multifamily apartments architecture complies with the "Modern Industrial" style permissible in the Broadway District Specific Plan. The project location and architecture are compatible with the architecture of nearby approved Home2 Suites hotel and the Palby's Junction office building.

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

The proposed multifamily development complies with the BDSP Broadway Residential development standards outlined in BDSP Table 2-13. The architecture and aesthetics are compatible with the surrounding neighborhood.

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

The Napa Cove project consists of three multifamily residential buildings at approximately 34 feet in height, varying among two- and three-story buildings. The buildings provide a "Modern Industrial" aesthetic, which is derived from re-appropriating traditional industrial materials at a more residential scale. According to the architect's narrative, the buildings contain a stucco chassis with a warm grey color with a medium sand finish, which blends with neighboring buildings. The central spines of the buildings are clad in grey brick that distinguishes entry and exit points. There is a secondary accent material, a fiber-cement board colored in "brushwork red", that symbolizes the traditional red hues of brick used in more industrial settings. The variety of colors and materials voids excessive variety and monotonous repetition.

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

The project consists of three residential buildings, which are setback from the property line along Highway 29. The proposed site will be supported with landscaping and a perimeter fence. The buildings are a Modern Industrial aesthetic and promote a harmonious transition between the Community Commercial Zoning District in the north and the Rural Residential (RR-20,000) Zoning district in the west.

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

The site has an entry from Melvin Rd and an emergency vehicle access (EVA) on Highway 29. The site has good site lines for the entrance and the parking lot provides ADA accessible parking stalls. The site has a continuous path of travel for pedestrians and vehicles can turn around inside the south-eastern parking lot. The site will safely accommodate vehicular and pedestrian circulation.

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

SECTION 3. CONDITIONS OF APPROVAL

General

1. The Design Permit approval is granted for the development of 66 affordable dwelling units distributed over 2 and 3 three story apartment buildings in a 3.47-acre site (APNs 058-362-005, -016, and -021) in the Broadway Residential zoning district, which shall be substantially as shown on Exhibit A, which is on file in the Community Development Department, except as modified by conditions contained in this approval. Exhibit A includes the following:
 - a. Site Plan prepared by Carlson, Barbee & Gibson, Inc, from San Ramon, CA, dated December 3, 2021, showing preliminary grading, utilities, and storm water quality control plans.
 - b. Architectural Plans prepared by HED, from Los Angeles, CA, dated November 8, 2021, showing preliminary site plans, building elevations, roof plans, and photo-simulations.
 - c. Landscaping Plans prepared by VanderToolen Associates, from Napa, CA, dated November 5, 2021, showing preliminary landscaping plans.
2. The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, consultants, volunteers and agents from and against all claims, actions, including actions to arbitrate

or mediate, damages, losses, judgments, liabilities, expenses and other costs, or proceedings against the City, its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, volunteers, or agents to attack, modify, set aside, void, or annul an approval, conditional approval, permit, entitlement, environmental document, environmental clearance, mitigation plan, or any other document or any of the proceedings, acts, or determinations taken, done, or made prior to granting of such approval, conditional approval, permit, entitlement, environmental clearance, environmental document, mitigation plan, or other documents, by the City, including, without limitation, an action against an advisory agency, appeal board, or legislative body within the applicable limitation period.

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

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

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

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

3. The approval shall become effective on the expiration of the appeal period, ten calendar days following the decision, unless an appeal to the City Council is filed. An appeal may be filed with the Community Development Director by filling out an Appeal Form accompanied by a fee of \$724. This approval is also subject to return of the "Applicant Confirmation of Conditions of Approval" form signed by the property owner. Should an appeal period end on a Saturday, Sunday or holiday, the final day for filing an appeal shall be the following Monday, or the next business day following a holiday. If there is no appeal, this approval will be final on December 27, 2021.

4. The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or the revocation of the approval of this application.
5. The date upon which the approval is final shall be considered the day of the imposition of the fees, dedications, reservations and exactions required by these conditions approval for the purposes of protesting the imposition pursuant to California Government Code Section 66020.
6. If no construction permits have been issued and construction commenced within two years of the date upon which this approval is final, the approval shall become null and void and of no effect. An extension of time may be granted by the Community Development Director upon the written request by a responsible party before the expiration of the two-year period, provided that the Director can make the findings that there have been no substantial changes in the approved plans, and that there has been no change of circumstances which would prevent any of the required findings of approval to be made.

Planning

7. The conditions of this Design Permit shall be printed on the first sheet of each plan set submitted for a building permit pursuant to this Design Permit, under the title 'Design Permit Conditions'. The second sheet may also be used if the first sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.
8. Prior to the issuance of any building permit, the applicant shall prepare an affordable housing agreement in accordance with the American Canyon Municipal Code (ACMC) Section 19.28.080 that includes the following:
 - a. Restricts the occupancy of 66 units of the apartment project units to tenants certified by the City as low- and very low- income households as defined by the Zoning Ordinance for at least 55 years. The maximum monthly rents for these low- and very-low- income shall be limited to Housing unit affordability will consist of the following:
 - i. 13 units at or below 30% area medium income (AMI)
 - ii. 13 units at or below 40% AMI
 - iii. 39 units at or below 60% AMI
 - iv. 1 manager unit (non-revenue)
9. Prior to the issuance of the first Building Permit, the applicant shall complete a maintenance agreement with the City for the use and maintenance of the Melvin Rd entry and drive way.
10. Prior to the issuance of the first Building Permit, the applicant shall record a Lot Line Adjustment to merge the three parcels on site.
11. Prior to the issuance of the first Building Permit, the applicant shall provide the Final Report for the Phase II environmental assessment. The Phase II conclusions shall be incorporated into the IS/Addendum.

12. In accordance with Broadway District Specific Plan (BDSP) Policy 3-4, existing utility poles on-site and along the property frontage are required to be placed underground. The site has three utility poles with overhead wires across the Broadway frontage and two on-site utility poles. Prior to release of improvement plan security, the applicant shall remove the three utility poles with overhead wires across the Broadway frontage and two on-site utility poles. No replacement poles near or on the same site as the removed pole is permitted.
13. In accordance to BDSP Section 2.2, all development shall exceed compliance with Title 24 Part 6 Energy Standards by 15 percent. Prior to the issuance of the first Building Permit, the applicant shall provide a letter from the architect or energy consultant that certifies the site complies with this standard.
14. 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 APMC Section 19.23.
15. 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.
16. Prior to building permit issuance, the applicant shall submit landscape plans that comply with APMC Section 19.22.060 Water Efficient Landscape Ordinance (WELO). The landscape architect shall document and attest to the compliance with the landscape plans. The plans shall incorporate the following requirements:
 - a. A Water-efficient landscape worksheet that complies with 19.22.060.
 - b. Provide cross sections for the north and west landscaping areas showing trees, landscaping, etc. that ensure the proposed trees would not be planted above proposed utilities or inappropriately planted in bio-retention areas. Ensure the landscape plans are reconciled with the civil plans and continue to provide a robust tree palette.
17. Prior to the issuance of a certificate of occupancy, the project's landscape architect shall certify that all plant materials have been installed in accordance with the approved landscape plan.
18. All tree stakes and ties shall be removed within one year following installation or as soon as trees are able to stand erect without support.
19. Clear sight triangles shall be maintained at all driveways. Low-lying plantings and other site fixtures, including signs, shall be no taller than 30 inches within the site's vision triangles.
20. All planting shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, planting shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. Required irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to insure continued regular watering of landscape areas, and health and vitality of landscape materials.

21. Prior to issuance of improvement plans, the applicant shall obtain an access easement to use the Melvin Park driveway. The access easement shall include agreement to provide fair share contribution to maintain the driveway in perpetuity.
22. 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.
23. Prior to issuance of the first building permit, the applicant shall replace the warm grey stucco color with a tan color similar to Sherwin Williams 7517.
24. Prior to issuance of a building permit, the applicant shall submit a street name and address plan for approval by the Community Development Director and American Canyon Fire Protection District.

Building and Safety

25. 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.
26. Prior to the final inspection, the applicant shall submit a letter of certification to the Building Official from the project architect, civil engineer, and landscape architect certifying that all improvements have been constructed in accordance with the approved building plans. A Certified Access Specialist (CAsp) shall also submit a letter certifying that all improvements have been constructed in compliance with applicable state and federal accessibility standards. Determination of consistency shall be subject to the review and approval of the Building Official.

Fire District General Comments

27. 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.
28. 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.
29. Buildings in excess of two stories shall pay Aerial Apparatus mitigation fees prior to the issuance of any building permits. (see current Standard Fees and Charges adopted by resolution).
30. 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.

31. All Fire related underground piping and fire appurtenances shall be shown on the Civil plan submittal. In addition to the Civil plan submittal, at least (1) plan set under separate cover shall be submitted to American Canyon Building Division for routing to the American Canyon Fire Protection District detailing all underground piping and related fire appurtenances including but not limited to underground piping, underground sweep detail, underground trench details showing depth of burial, type of backfill, manufacturer's specifications of piping, valves joints, fittings and calculated size and locations of thrust blocks, hydrants locations (designate public or private), gate shut-off valves, PIV's, FDC's, fire pumps, fire pump and/or riser rooms.
32. 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.
33. 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.
34. An approved water supply capable of supplying the required fire flow for fire protection systems shall be provided to all premises upon which facilities or buildings are hereby constructed or moved into or within the City. Required fire flow and hydrant distribution shall be in accordance with Appendix B and C of the California Fire Code. Applicant shall demonstrate on plan submittal; square footage of each building on plan and provide the required fire flow information. Applicant shall demonstrate that the number and spacing of onsite fire hydrants meets with requirements of the California Fire Code. ***See sample below regarding fire flow and hydrant detail information needed.***

BUILDING FIRE FLOW REQUIREMENTS – CFC TABLES B105.2 & B105.1(2)
INFORMATION BELOW IS A SAMPLE AND FOR REFERENCE ONLY

Table B105.1(2) – Building size = 129, 600 square feet

Construction type = Type IIA
 FF = 5,250 gpm at 20 psi
 Duration = 4 hours

Table B105.2 – Fire sprinkler allowance = - 50%

5,250 – 2,625 = 2,625 gpm
 FF = 2,625 gpm @ 20 psi
 Duration = 2 hours

Table CC105.1 – Approximate number of hydrants = 3

Average spacing = 400 feet + 25% allowable increase = 500
 Maximum distance from street or frontage = 225 feet = 50% allowable
 increase = 337.5

35. 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.

36. 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.
37. 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.
38. 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. Fire Department Connections (FDC) shall be located not more than 100 ft. from the nearest fire hydrant.

Public Works General Conditions of Approval

45. 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.

46. 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.
47. 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.
48. Unless otherwise explicitly permitted, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the project engineer shall provide a letter describing the scope of the search done to make this determination.
49. 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.
50. 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.
51. 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.
52. 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.
53. 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.

54. 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.
55. 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.
56. 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.
57. 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.
58. 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.
59. 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.
60. 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.

61. 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.
62. 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.
63. 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.
64. 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.
65. 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.
66. 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.
67. The development shall comply with the City's Zero Water Footprint policy.
68. All landscaping shall be designed to use recycled water for irrigation. Recycled water landscaping shall be designed to comply with California Code of Regulations Title 22 and shall include design details to prevent runoff of recycled water. The irrigation system shall include an ET/SMART controller. Property shall connect to recycled water for irrigation once available.

Public Works Special Conditions of Approval

69. The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans titled “CRP Affordable” Napa Cove Apartments (Preliminary Plans) dated November 8, 2021 and Preliminary Site Plan Alternative dated December 3, 2021 prepared by CBG Civil Engineers, except as modified by these conditions.
70. The Improvement Plans shall be tied to the State of California coordinate system.
71. The Applicant shall design and construct all of the “**Public Improvements**” generally shown on the Preliminary Plans and more specifically described below. Applicant shall be responsible for obtaining a Caltrans encroachment permit for all work within State Route 29.
- a. State Route 29 Frontage Improvements:
Widen State Route 29 to provide a 16-foot wide paved shoulder and install curb, gutter and a 12-foot wide multi-use path along the entire State Route 29 frontage beginning from the southern end of the property, APN 058-362-016 and extending to the north of the property, APN 058-362-005. The frontage multi-use path shall have a minimum unobstructed width of 12-feet.
 - b. Melvin Park Improvements:
Widen the drive isle along the north side of Melvin Park (APN 058-362-015) to 25-foot wide and widen the driveway apron at Melvin Road to a minimum width of 24-feet.
 - c. State Route 29 Drainage:
Construct storm drain facilities to convey the runoff from State Route 29 that currently drains on to the site to Melvin Road.
 - d. Melvin Road Traffic Calming:
The project will generate additional traffic in Melvin Road. The project traffic engineer shall analyze traffic impact and recommend implementing traffic calming measures. Traffic calming measures shall be implemented at the cost of the Applicant.
72. 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.

73. At such time as the City establishes an assessment district or other mechanism to fund the design and construction of off-site downstream storm drain facilities in Melvin Road and James Road, Applicant agrees to participate and pay their fair share of the cost of said drainage facilities.

74. 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.
 - viii. Traffic Impact Study
 - ix. Application for Water and Sewer Services

75. 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.

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

- a. Record a private access easement over the adjacent Lands of City of American Canyon (APN 058-362-015). Applicant shall prepare the legal description, plat and deed and submit them to the City for review.
- 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. Applicant shall prepare the legal description, plat and deed and submit them to the City and State for review.
- c. Merge the three existing parcels (APNs 058-312-005, -016 and -021) into a single parcel through the recordation of a lot merger or lot line adjustment.
- d. Obtain a Caltrans Encroachment Permit to allow the widening of State Route 29 and the construction of the frontage improvement within the State right-of-way.
- e. Provide written acknowledgment by the Geotechnical Engineer of Record that the Plans incorporate all design and construction criteria specified in the Geotechnical Report.
- f. Subject to the terms of Condition 53, 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.
- g. 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.
- h. 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.
- i. 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).

77. 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

78. 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.

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

- a. Restore all adjacent off-site road surfaces to pre-project conditions.
- b. Submit a certification by the Geotechnical Engineer of Record that all the work has been completed in substantial conformance with the recommendations in Soils Investigation/Geotechnical Report.
- c. Provide a mylar and digital copy of the Improvement Plans that include all as-built or field changes, in digital pdf and AutoCAD Civil 3D (.dwg) format compatible with the City's current version, and tied to the NAD83 (California Zone 2, feet) coordinate system.
- d. Provide a letter stating that all of the Developer's Conditions of Approval have been met.
- e. Provide a letter from the Civil Engineer of Record certifying that all the site improvements were constructed and inspected in substantial conformance with the approved plans and City Standards.
- f. Enter into and record a post-construction Stormwater Operations and Maintenance Agreement with the City.

Mitigation Measures

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

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or more as needed.

- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
 - d. All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour.
 - e. All roadways, driveways, and sidewalks shall be paved as soon as possible.
 - f. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
 - g. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (beyond the 5-minute limit required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
 - h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
 - i. A publicly visible sign shall be posted with a name and telephone number of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.
81. **BDSP EIR MM AIR-3:** Prior to issuance of the first construction permit for development projects that occur pursuant to the Specific Plan, the applicant shall provide documentation to the City of American Canyon demonstrating that all off-road by diesel equipment proposed for use is powered with Tier 3 or cleaner engines.
82. **BDSP EIR MM AIR-4a:** Prior to issuance of building permits for any sensitive receptor use (residential areas, elementary school, daycare centers, etc.) that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:
- a. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed BAAQMD's cumulative risk threshold for toxic air contaminant impacts.
 - b. Prepare and submit a Health Risk Analysis to the City of American Canyon, consistent with BAAQMD's recommended methodology, that demonstrates the potential risk from roadways rail, and stationary sources would not exceed the BAAQMD's cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.
83. **BDSP EIR MM BIO-1b:** Prior to tree removal activities that occur during the nesting season (February 1 and August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 14 days prior to vegetation removal. If the biologist observes nesting birds to be present, a minimum 250-foot protective buffer shall be established around the nest until the young have fledged. This mitigation measure shall not apply to tree removal activities that occur outside the nesting season (September 1 to January 31).

84. **BDSP EIR MM CUL-1:** If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities associated with new development that occurs pursuant to the Specific Plan, all construction activities within 100 feet of the find shall halt and the City of American Canyon shall be notified. Prehistoric archaeological materials might include obsidian and chert flakedstone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the City of American Canyon. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.
85. **BDSP EIR MM CUL-3:** If potential fossils are discovered during project implementation, all earthwork or other types of ground disturbance within 100 feet of the find shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find. The paleontologist shall report his/her findings to the City of American Canyon. Based on the scientific value or uniqueness of the find, the paleontologist shall either record the find and recommend that the City of American Canyon allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist shall, if required, propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with Society of Vertebrate Paleontology guidelines and currently accepted scientific practice. If required, treatment for fossil remains shall include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and, if required, shall also include preparation of a report for publication describing the finds.
86. **BDSP EIR MM CUL-4:** In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease until the Napa County Coroner has been contacted to determine that no investigation of the cause of death is required. The

Native American Heritage Commission (NAHC) shall be contacted within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5(d)).

87. **BDSP EIR MM GEO-1a:** Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan that are located within an Alquist-Priolo Special Study Zone, the City of American Canyon shall verify that the applicant has commissioned a fault investigation. The fault investigation shall be prepared by a licensed geologist or geotechnical engineer and determine the precise location of the West Napa Fault in relation to the proposed project. All recommended fault setbacks set forth in the fault investigation shall be shown on project plans.
88. **BDSP EIR MM GEO-1b:** Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has commissioned a design-level geotechnical report. The report shall be prepared by a licensed geologist or geotechnical engineer and determine whether the geologic conditions of the site in question are suitable for development. All recommendations for grading, soil engineering, and construction shall be incorporated into the project plans.
89. **BDSP EIR MM HYD-1a:** Prior to issuance of grading permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook—Construction or the Caltrans Stormwater Quality Handbook Construction Site BMPs Manual.
90. **BDSP EIR MM HYD-1b:** Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the project applicant shall prepare a Stormwater Control Plan that includes post-construction stormwater controls in the site design to satisfy requirements of the Phase II Small MS4 Permit. This shall include a review of the final Stormwater Control Plan by the City of American Canyon to ensure that the required controls are in place. Provision E.12.h of the MS4 Permit requires that an operation and maintenance program be implemented for post-construction

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

91. **BDSP EIR MM NOI-1:** Prior to issuance of building permits of noise-sensitive land uses within the 65 dBA Ldn 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.

92. **BDSP EIR MM NOI-2a:** Prior to issuance of grading permits, if construction activities will (1) pile drive within 150 feet or (2) utilize mobile construction equipment within 20 feet of any existing structure with sensitive receptors, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from construction-related vibration impacts to the existing structure(s) with sensitive receptors. The vibration analysis shall determine the vibration levels created by construction activities at the existing structure(s) with sensitive receptors and, if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.25 inch per second PPV.

PASSED, APPROVED AND ADOPTED at a regular meeting of the Planning Commission on December 16, 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Tyrone Navarro, Chair

ATTEST:

APPROVED AS TO FORM:

Nicolle Jones, Administrative Technician

William D. Ross, City Attorney

EXHIBITS:

- A. Napa Cove Design Permit Plans
- B. BDSP PEIR Addendum for Napa Cove

C. Applicant confirmation of Conditions of Approval



EXHIBIT C
Applicant Confirmation of Conditions of Approval
Napa Cove Design Permit
(FILE NO. PL21-0027)

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 December 16, 2021.

Applicant's signature

Date

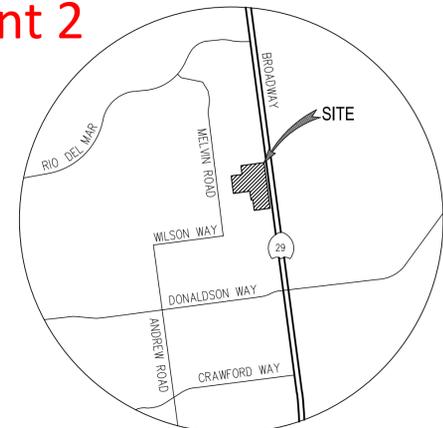
Applicant's name

Property Owner's signature

Date

Property Owner's name

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



VICINITY MAP
NOT TO SCALE

GENERAL NOTES

- ASSESSORS PARCEL NO. 058-362-005, 058-362-016 & 058-362-021
- SITE AREA: 3.48 AC±
- LOTS: 1
- DWELLING UNITS: 66
- SITE DENSITY: 18.97 DU/AC
- EXISTING GENERAL PLAN: COMMUNITY COMMERCIAL/RESIDENTIAL
PROPOSED GENERAL PLAN: COMMUNITY COMMERCIAL/RESIDENTIAL
- EXISTING ZONING: ZONE D-CC & ZONE E-CC W/ RESIDENTIAL OVERLAY
PROPOSED ZONING: ZONE D-CC & ZONE E-CC W/ RESIDENTIAL OVERLAY
- BENCHMARK: THE BENCHMARK FOR THIS SURVEY IS AN NSG BRASS DISK IN PVC PIP HAVING DESIGNATION HPGN D CA 04 KH, PID JT9617, AND HAVING A PUBLISHED NAVD88 ELEVATION OF 32.9 FEET (EPOCH 2010).
- EXISTING STRUCTURES: NONE
- EXISTING UTILITIES: EXISTING UTILITIES WITHIN THE PROPERTY BOUNDARY ARE TO REMAIN AND BE USED AS NEEDED
- STREETS: ALL DRIVE AISLES WITHIN THE PROJECT WILL BE PRIVATE AND WILL BE PRIVATELY MAINTAINED. (MINIMUM LONGITUDINAL SLOPE=0.5%)
- TREES: STREET TREES WILL BE INSTALLED PER THE CITY OF AMERICAN CANYON STANDARDS.
- STREET LIGHTS: STREET LIGHTS WILL BE INSTALLED PER THE CITY OF AMERICAN CANYON STANDARDS (OR APPROVED EQUAL).
- WALLS: ALL WALLS WILL BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.
- PRIVATE UTILITIES: PROPOSED STORM DRAIN FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- PUBLIC UTILITIES: PROPOSED ONSITE WATER AND SANITARY SEWER FACILITIES ARE PUBLIC AND WILL BE WITHIN A PUBLIC UTILITY EASEMENT. PROPOSED WATER AND SEWER FACILITIES WILL BE CONSTRUCTED PER CITY OF AMERICAN CANYON STANDARDS.
- LANDSCAPING: ALL LANDSCAPING WITHIN PROJECT BOUNDARY WILL BE PRIVATELY OWNED AND MAINTAINED.
- FLOOD ZONE: ZONE X: AREA OF MINIMAL FLOOD HAZARD.
SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FLOOD INSURANCE RATE MAP, MAP NUMBER 06055C0617F
DATE: AUGUST 3, 2016
- WELLS ONSITE: NONE
- UTILITIES:
WATER: CITY OF AMERICAN CANYON
SEWER: CITY OF AMERICAN CANYON
STORM DRAIN: CITY OF AMERICAN CANYON
GAS: PG&E
ELECTRIC: PG&E
TELEPHONE: AT&T
CABLE TV: COMCAST
- PHASING: PROJECT MAY BE CONSTRUCTED IN PHASES
- DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN

ABBREVIATIONS

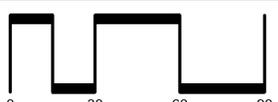
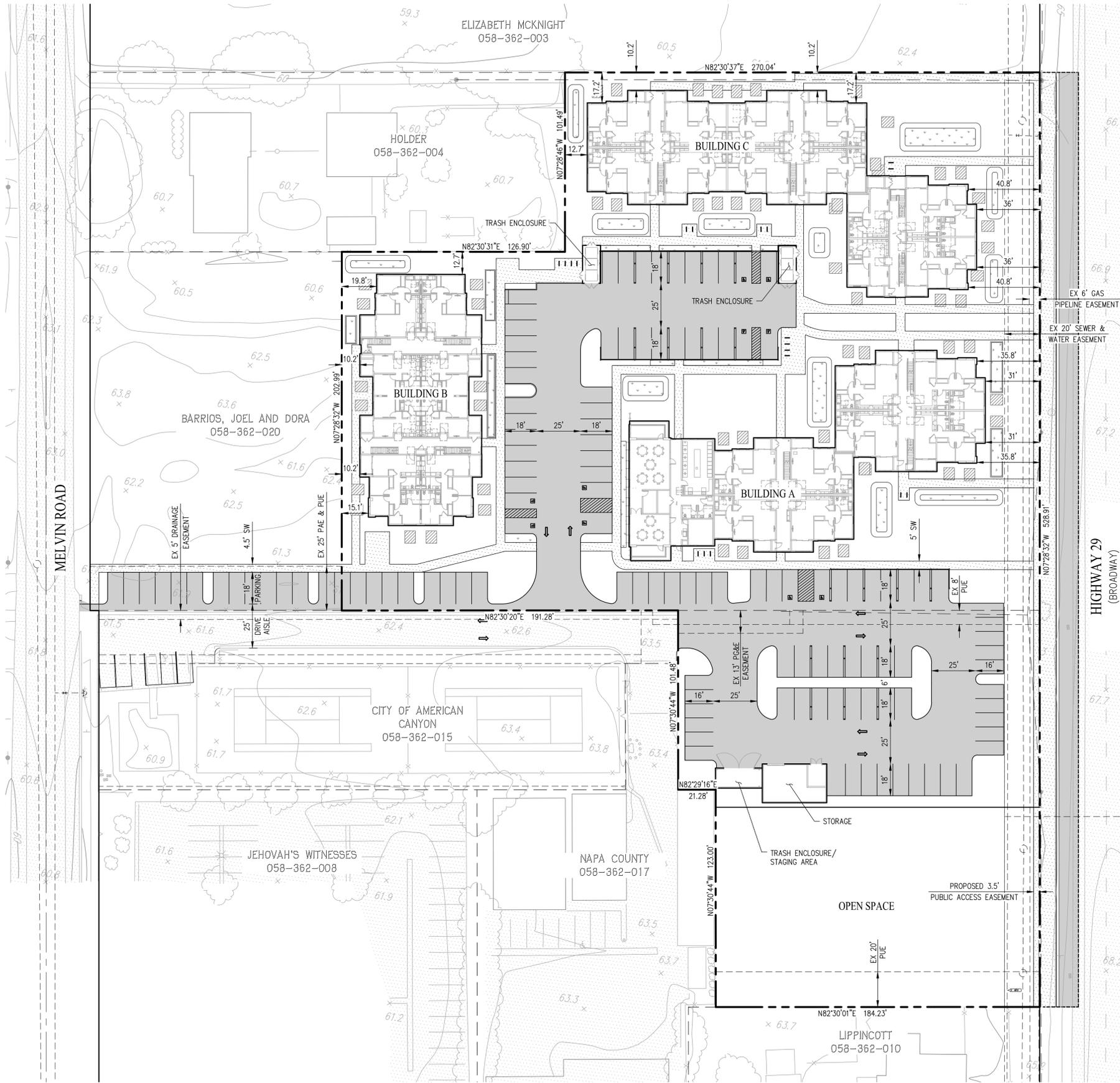
AC	ACRES	PAE	PUBLIC ACCESS EASEMENT
AU	ACCESSIBLE UNIT	PL	PROPERTY LINE
BD	BOUNDARY	PUE	PUBLIC UTILITY EASEMENT
CB	CATCH BASIN	PVC	POLYVINYL CHLORIDE
BRC	BACK OF ROLLED CURB	PSDE	PUBLIC STORM DRAIN EASEMENT
C	COMPACT	PVAW	PUBLIC VEHICLE ACCESS WAY
CC	CURB CUT	R	RADIUS
CL	CENTERLINE	RCP	REINFORCED CONCRETE PIPE
EC	ELECTROLIER	RW	RIGHT-OF-WAY
EL	ELEVATION	S	SLOPE
EX	EXISTING	SF	SQUARE FEET
FC	FACE OF CURB	SD	STORM DRAIN
FF	FINISHED FLOOR	SDMH	STORM DRAIN MANHOLE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FI	FIELD INLET	SSMH	SANITARY SEWER MANHOLE
FS	FIRE SERVICE	SW	SIDEWALK
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	TVC	TOP OF VERTICAL CURB
LF	LINEAR FEET	TC	TOP OF GRATE
LS	LANDSCAPE STRIP	TRC	TOP OF ROLLED CURB
MAX	MAXIMUM	TYP	TYPICAL
MH	MANHOLE	W	WATER
MIN	MINIMUM	WLE	WATER LINE EASEMENT
OB	OVERBUILD	WM	WATER METER
P	PAD		

LEGEND

	EX PAVEMENT
	DECORATIVE PAVEMENT (SEE LANDSCAPE PLANS)
	PROPOSED PAVEMENT
	PROPOSED SIDEWALK
	LADDER PAD

CONTACTS:

- DEVELOPER: CRP AFFORDABLE HOUSING & COMMUNITY DEVELOPMENT
4455 MORENA BLVD, SUITE #107
SAN DIEGO, CA 92117
(619) 483-4709
SHADY FAYED
- ENGINEER: CARLSON, BARBEE & GIBSON, INC.
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CALIFORNIA 94583
(925) 866-0322
COLT ALVERNAZ, RCE 75740
ANDREA BELLANCA, RCE 61806



SHEET INDEX	
CIVIL	
C-1.00	PRELIMINARY SITE PLAN
C-2.00	EXISTING CONDITIONS
C-3.00	PRELIMINARY GRADING PLAN
C-3.01	PRELIMINARY GRADING SECTIONS
C-4.00	PRELIMINARY UTILITY PLAN
C-5.00	PRELIMINARY STORMWATER CONTROL PLAN
ARCHITECTURAL	
A-0.00	NAPA COVE APARTMENTS
A-01a	SITE CONTEXT
A-01b	SITE FOOTPRINT
A-01c	ARCHITECTURAL SITE PLAN
A-02.1	TYPICAL UNIT PLANS
A-02.2	BUILDING A PLAN
A-02.3	BUILDING A PLAN
A-02.4	BUILDING A PLAN
A-02.5	BUILDING B PLANS
A-02.6	BUILDING C PLAN
A-02.7	BUILDING C PLAN
A-02.8	BUILDING C PLAN
A-02.9	SITE ROOF PLAN
A-02.10	FIRE ACCESS PLAN
A-03.1	BUILDING SECTIONS
A-03.2	BUILDING SECTIONS
A-04.1	ELEVATIONS - BUILDING A
A-04.2	ELEVATIONS - BUILDING A
A-04.3	ELEVATIONS - BUILDING B
A-04.4	ELEVATIONS - BUILDINGS B & C
A-04.5	ELEVATIONS - BUILDING C
A-06.1	ARCHITECTURAL PRECEDENTS
A-06.2	ARCHITECTURAL PRECEDENTS
A-07.1	PERSPECTIVES - BUILDING A
A-07.2	PERSPECTIVES - BUILDING B
ELECTRICAL	
EO.01	LUMINAIRE SCHEDULE
E1.00	SITE LIGHTING
E1.01	SITE PHOTOMETRICS
LANDSCAPE	
L-1	LANDSCAPE PLAN
L-2	ENLARGEMENT PLAN
L-3	HYDROZONE PLAN
L-4	CONCEPTUAL LANDSCAPE IMAGERY
L-5	CONCEPTUAL PLANT IMAGERY

FLOOR AREA CALCULATIONS		
RESIDENTIAL USE: 1.0 MAX FAR (AMERICAN CANYON MUNICIPAL CODE 19.11.050 - TABLE 2)		
SITE AREA: +/-151,489 SF / +/-3.48 ACRES (PER SURVEY)		
MAXIMUM FLOOR AREA: 151,489 SF		
BUILDING	FLOOR AREA TYPE	AREA
A	FLOOR AREA - PROJECTED AREA	1275 SF
A	FLOOR AREA - RESIDENTIAL	17945 SF
		19220 SF
B	FLOOR AREA - PROJECTED AREA	1859 SF
B	FLOOR AREA - RESIDENTIAL	17637 SF
		19495 SF
C	FLOOR AREA - PROJECTED AREA	1813 SF
C	FLOOR AREA - RESIDENTIAL	24751 SF
		26563 SF
COMMUNITY BUILDING	FLOOR AREA - COMMON SPACE	3268 SF
		3268 SF
SHED/STORAGE	FLOOR AREA - COMMON SPACE	885 SF
		885 SF
FLOOR AREA RATIO PROVIDED: 0.46 : 1		
		69432 SF

GROSS BUILDING AREAS		
BUILDING	AREA	AREA TOTALS
A	GROSS BALCONY/PATIO	1430 SF
A	GROSS CIRCULATION	2354 SF
A	GROSS RESIDENTIAL	17422 SF
A	GROSS UTILITY	816 SF
		22021 SF
B	GROSS BALCONY/PATIO	1967 SF
B	GROSS CIRCULATION	3317 SF
B	GROSS RESIDENTIAL	15386 SF
B	GROSS UTILITY	535 SF
		21205 SF
C	GROSS BALCONY/PATIO	5543 SF
C	GROSS CIRCULATION	3212 SF
C	GROSS RESIDENTIAL	20004 SF
C	GROSS UTILITY	788 SF
		29546 SF
COMMUNITY BUILDING	GROSS COMMUNITY BUILDING	3368 SF
		3368 SF
SHED/STORAGE	GROSS UTILITY	885 SF
		885 SF
		77026 SF

GROSS LOT COVERAGE		
(PER TABLE 2-6 OF BROADWAY DISTRICT SPECIFIC PLAN)		
SITE AREA: +/-151,489 SF / +/-3.48 ACRES (PER SURVEY)		
MAX. LOT COVERAGE FOR RESID. USES - 50%: 75,745 SF		
BUILDING	AREA	AREA TOTALS
A	GROSS BALCONY/PATIO	637 SF
A	GROSS CIRCULATION	1253 SF
A	GROSS RESIDENTIAL	7588 SF
A	GROSS UTILITY	141 SF
		9619 SF
B	GROSS BALCONY/PATIO	704 SF
B	GROSS CIRCULATION	1381 SF
B	GROSS RESIDENTIAL	6572 SF
B	GROSS UTILITY	98 SF
		8756 SF
C	GROSS BALCONY/PATIO	4480 SF
C	GROSS CIRCULATION	1837 SF
C	GROSS RESIDENTIAL	7109 SF
C	GROSS UTILITY	134 SF
		13558 SF
COMMUNITY BUILDING	GROSS COMMUNITY BUILDING	3368 SF
		3368 SF
SHED/STORAGE	GROSS UTILITY	885 SF
		885 SF
LOT COVERAGE PROVIDED - 24%		
		36187 SF

- ### CODES & STANDARDS
- APPLICABLE LOCAL ORDINANCES:**
- AMERICAN CANYON MUNICIPAL CODE (LAMC)
 - AMERICAN CANYON BROADWAY DISTRICT SPECIFIC PLAN
 - AMERICAN CANYON BUILDING DIVISION
 - AMERICAN CANYON FIRE PROTECTION DISTRICT
- APPLICABLE STATE CODES:**
- 2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
 - 2019 CALIFORNIA BUILDING CODE (CBC)
 - 2019 CALIFORNIA ELECTRICAL CODE (CEC)
 - 2019 CALIFORNIA MECHANICAL CODE (CMC)
 - 2019 CALIFORNIA PLUMBING CODE (CPC)
 - 2019 CALIFORNIA ENERGY CODE
 - 2019 CALIFORNIA FIRE CODE (CFC)
 - 2019 CALIFORNIA REFERENCED STANDARDS
 - 2019 CALIFORNIA FIRE MARSHAL REGULATIONS
 - SECTION 504 OF THE REHABILITATION ACT OF 1973
 - CALIFORNIA VEHICLE CODE (CVC)
- FEDERAL STANDARDS:**
- 2010 AMERICANS WITH DISABILITIES ACT (ADA)
 - FAIR HOUSING ACT (FHA), AS AMENDED, 42 U.S.C. 3604 (F) (3) (C)
 - HUD FAIR HOUSING ACCESSIBILITY GUIDELINES (PUBLISHED ON MARCH 6, 1991)
 - SUPPLEMENTAL NOTICE TO FAIR HOUSING ACCESSIBILITY GUIDELINES: QUESTIONS AND ANSWERS ABOUT THE GUIDELINES (PUBLISHED ON JUNE 28, 1994)
 - ANSI A117.1 (1986): USED WITH FHA, HUD FAIR HOUSING ACT REGULATIONS, AND HUD FAIR HOUSING ACCESSIBILITY GUIDELINES
 - SECTION 504 OF THE REHABILITATION ACT OF 1973
 - TITLE VII OF THE CIVIL RIGHTS ACT OF 1968

DENSITY ALLOWED			
(PER APPROVED AMERICAN CANYON BROADWAY DISTRICT SPECIFIC PLAN)			
SPECIFIC PLAN:	BROADWAY DISTRICT SPECIFIC PLAN / (BROADWAY RESIDENTIAL SUBAREA)		
ZONE/DISTRICT:	RB (BROADWAY RESIDENTIAL DISTRICT)		
SITE AREA:	+/-151,489 SF / +/-3.48 ACRES (PER SURVEY)		
DENSITY ALLOWED:	MINIMUM - 12du/AC - 42 DWELLING UNITS MAXIMUM - 30du/AC - 105 DWELLING UNITS		
DENSITY PROVIDED			
BUILDING	UNIT TYPE	AREA TOTALS	QUANTITY
A	2 BEDROOM UNIT	9371 SF	12
A	3 BEDROOM UNIT	5947 SF	6
		15318 SF	18
B	1 BEDROOM UNIT	6746 SF	12
B	2 BEDROOM UNIT	3126 SF	4
B	3 BEDROOM UNIT	5975 SF	6
		15846 SF	22
C	1 BEDROOM UNIT	2220 SF	4
C	2 BEDROOM UNIT	12477 SF	16
C	3 BEDROOM UNIT	5942 SF	6
		20639 SF	26
		51803 SF	66
UNIT TYPE	SQUARE FOOTAGE	MIX PERCENTAGE	QUANTITY
1 BEDROOM UNIT	638 SF	24%	16
2 BEDROOM UNIT	891 SF	49%	32
3 BEDROOM UNIT	1,105 SF	27%	18
			66

ACCESSIBLE DWELLING UNITS			
ADA UNITS:	10 UNITS	(HVI) UNITS:	7 UNITS
	(3) 1-BEDROOM UNITS		(2) 1-BEDROOM UNITS
	(4) 2-BEDROOM UNITS		(3) 2-BEDROOM UNITS
	(3) 3-BEDROOM UNITS		(2) 3-BEDROOM UNITS

PARKING REQUIRED			
(PER AMERICAN CANYON MUNICIPAL CODE 19.21.030 / TABLE 19.21.030(A))			
UNIT TYPE	COVERED STALLS	UNCOVERED STALLS	GUEST STALLS
1 BDR UNITS -	1 COVERED STALL	+ 0.5 UNCOVERED STALL	
2 BDR UNITS -	1 COVERED STALL	+ 1 UNCOVERED STALL	
3 BDR UNITS -	1 COVERED STALL	+ 1 UNCOVERED STALL	
GUEST			1 STALL PER 4 UNITS
16 1BDR UNITS -	16 COVERED STALLS	+ 8 UNCOVERED STALLS	+ 4 UNCOVERED STALLS
32 2BDR UNITS -	32 COVERED STALLS	+ 32 UNCOVERED STALLS	+ 8 UNCOVERED STALLS
18 3BDR UNITS -	18 COVERED STALLS	+ 18 UNCOVERED STALLS	+ 5 UNCOVERED STALLS
66 TOTAL UNITS	66 COVERED	+ 58 UNCOVERED	+ 17 UNCOVERED
66 COVERED + 75 UNCOVERED = 141 TOTAL STALLS			

PARKING PROVIDED		
DENSITY BONUS INCENTIVE #1 REQUESTED - REDUCE REQUIRED PARKING REQUIREMENTS		
- REDUCTION IN OVERALL REQUIRED PARKING		
- REDUCTION IN COVERED STALL REQUIRED		
- REMOVAL OF GUEST PARKING REQUIREMENT		
STALL TYPE	Type	TOTALS
COVERED PARKING STALLS	EVCS Resid. Accessible - 9' x 18'	2
COVERED PARKING STALLS	EVCS Residential - 9' x 18'	2
COVERED PARKING STALLS	Residential - 9' x 18'	40
COVERED PARKING STALLS	Residential Accessible - 9' x 18'	5
		49
UNCOVERED PARKING STALLS	EVCS Resid. Accessible - 9' x 18'	2
UNCOVERED PARKING STALLS	EVCS Resid. Van - 12' x 18'	1
UNCOVERED PARKING STALLS	EVCS Residential - 9' x 18'	3
UNCOVERED PARKING STALLS	Residential - 9' x 18'	17
UNCOVERED PARKING STALLS	Residential Accessible - 9' x 18'	1
UNCOVERED PARKING STALLS	Residential Compact - 8' x 16'	9
UNCOVERED PARKING STALLS	Residential Van - 12' x 18'	2
		35
		84

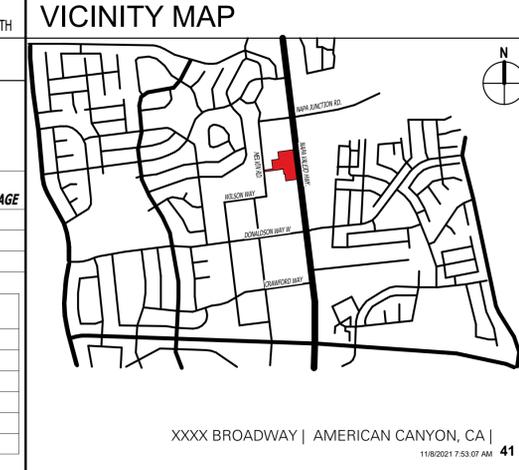
BICYCLE PARKING PROVIDED			
BICYCLE STORAGE TYPE	SHORT-TERM STORAGE	Long-Term Bicycle Storage	BIKE STORAGE CAPACITY
BICYCLE LOCKER	No	Yes	10
BICYCLE RACK	Yes	No	30

OPEN SPACE PROVIDED			
(PER TABLE 2-6 OF BROADWAY DISTRICT SPECIFIC PLAN)			
RESIDENTIAL PRIVATE OPEN SPACE:	GROUND FLOOR - 100 SF PATOS W/ 8'-0" MINIMUM DEPTH	UPPER FLOORS - 50 SF BALCONIES W/ 6'-0" MINIMUM DEPTH	
DENSITY BONUS INCENTIVE #2 REQUESTED			
- REDUCE REQUIRED ALL PATIO/BALCONY MINIMUM SQUARE FOOTAGE TO 50 SF.			
- REDUCE REQUIRED ALL PATIO/BALCONY MINIMUM DEPTH TO 5'-0".			
EVERY UNIT PROVIDED A PATIO OR BALCONY AT LEAST 5'-0" IN DEPTH W/ A MINIMUM OF 50 SF			
UNIT TYPE	SQUARE FOOTAGE	PRIVATE OPEN SPACE	MIX PERCENTAGE
1 BEDROOM UNIT	638 SF	56 SF	24%
2 BEDROOM UNIT	891 SF	67 SF	49%
3 BEDROOM UNIT	1,105 SF	69 SF	27%
			66

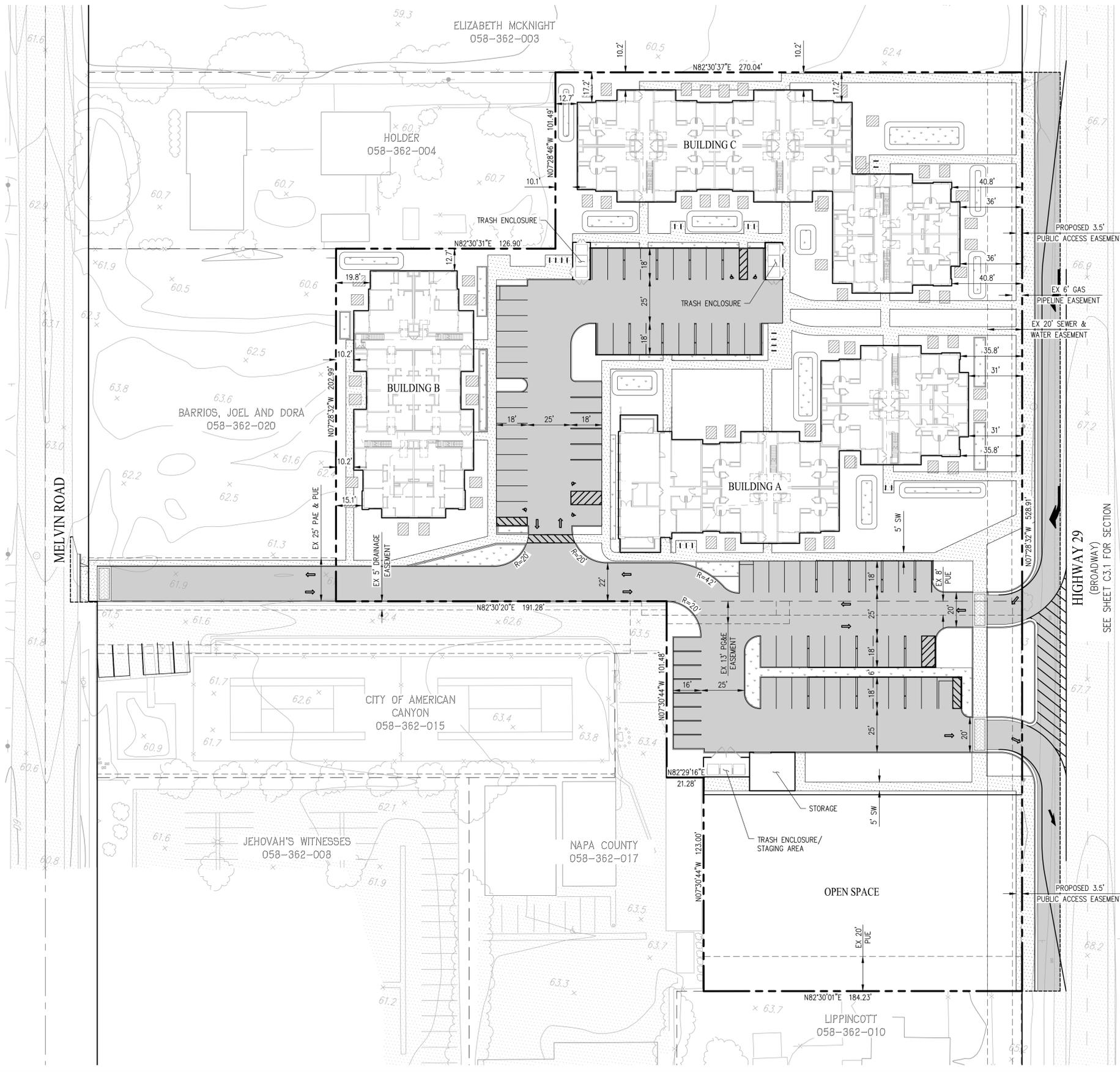
COMMON OPEN SPACE		
BUILDING	UNIT TYPE	COMMON OPEN SPACE
A	COMMON PATIO - A	132 SF
A	COMMON PATIO - B	98 SF
A	MULTI-PURPOSE ROOM A	728 SF
A	MULTI-PURPOSE ROOM B	393 SF
	TOT LOT PLAYGROUND	2052 SF
		3403 SF

PROJECT TEAM	
APPLICANT	ARCHITECT
CRP AFFORDABLE GROUP 4455 MORENA BOULEVARD SUITE 107 SAN DIEGO, CA 92117	HED 550 SOUTH HOPE STREET SUITE 2500 LOS ANGELES, CA 90071 PHONE: 213.542.4500 CONTACT: TRISTAN HALL
LANDSCAPE ARCHITECT	CIVIL ENGINEERING
VANDERTOLEN ASSOCIATES 855 BORDEAUX WAY SUITE 240 NAPA, CALIFORNIA 94558 PHONE: 707.224.2299 CONTACT: PHIL VANDERTOOLEN	CBG CIVIL ENGINEERS 2633 CAMINO RAMON SUITE 350 SAN RAMON, CALIFORNIA 94583 PHONE: 925.866.0322 CONTACT: ANDREA BELLANCA
MECHANICAL / ELECTRICAL / PLUMBING ENGINEERING	
EMERALD CITY 21705 HIGHWAY 99 LYNWOOD, WASHINGTON 98036 PHONE: 425.741.1200 CONTACT: ADAM FRENCH	

PROJECT INFORMATION	
PROJECT NAME:	NAPA COVE APARTMENTS
ADDRESS:	BROADWAY ROAD AMERICAN CANYON, CA 94503
OWNER / APPLICANT:	CRP AFFORDABLE GROUP
APNs:	058-362-005 / 058-362-021 / 058-362-016
LOT AREA:	+/-151,588 SF / +/-3.48 ACRES (PER SURVEY) (HED UNABLE TO CONFIRM SITE AREA / OWNER TO PROVIDE SURVEY)
PROJECT DESCRIPTION:	CAMPUS STYLE, MULTI-FAMILY DEVELOPMENT CONSISTING OF 66 DWELLING UNITS ACROSS 3 RESIDENTIAL BUILDINGS (2 & 3 STORIES) OF TYPE V-A CONSTRUCTION. SURFACE PARKING PROVIDED THROUGHOUT PROPERTY.
AFFORDABLE UNIT COUNT:	MULTI-FAMILY DEVELOPMENT CONSISTS OF 100% AFFORDABLE DWELLING UNITS EXCLUDING ONE MANAGER UNIT.
CONSTRUCTION TYPE:	TYPE V-A
OCCUPANCY:	R2 & B OCCUPANCIES
ZONING:	BASE ZONING: COMMUNITY COMMERCIAL (W/ RESIDENTIAL OVERLAY)
SPECIFIC PLAN AREA:	BROADWAY DISTRICT SPECIFIC PLAN - BROADWAY RESIDENTIAL
ALLOWABLE BLDG HEIGHT:	42 FEET W/ 30FT SETBACK
PROPOSED BLDG HEIGHT:	34' - 11"
SETBACKS (REQUIRED):	BROADWAY R.O.W. 30 FEET OFF BROADWAY R.O.W. MELVIN ROAD R.O.W. 15 FEET OFF MELVIN ROAD R.O.W. MIN. SIDE YARD 10 FEET MIN. REAR YARD 10 FEET
INCENTIVES & CONCESSIONS:	1 - REDUCED PARKING - ALLOW 84 PARKING STALLS TO INCLUDE ALL CARPORTS, OPEN PARKING AND ELECTRIC CHARGING STATIONS. - ALLOW 49 COVERED STALL SPACES. - WAIVE GUEST PARKING REQUIREMENT. 2 - REDUCE REQUIRED BUILDING SEPARATION - ALLOW 30'-4" SEPARATION BETWEEN BLDGS. A & C 3 - REDUCE PRIVATE OPEN SPACE STANDARDS - REDUCE ALL MINIMUM PATIO/BALCONY DIMENSION TO 5'-0" - REDUCE ALL MINIMUM PATIO/BALCONY SQUARE FOOTAGE TO 50 SQUARE FEET.



ENTITLEMENT SUBMITTAL
NOVEMBER 8, 2021

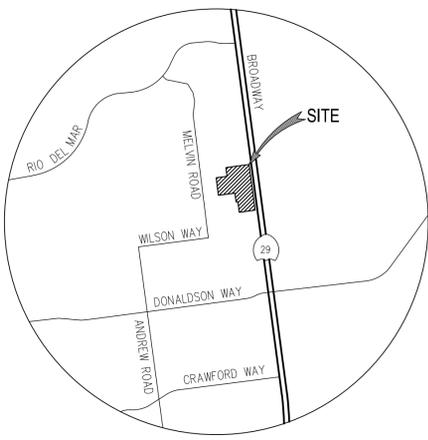


GENERAL NOTES

- ASSESSORS PARCEL NO. 058-362-005, 058-362-016 & 058-362-021
- SITE AREA: 3.48 AC±
- LOTS: 1
- DWELLING UNITS: 66
- SITE DENSITY: 18.97 DU/AC
- EXISTING GENERAL PLAN: COMMUNITY COMMERCIAL/RESIDENTIAL
PROPOSED GENERAL PLAN: COMMUNITY COMMERCIAL/RESIDENTIAL
- EXISTING ZONING: ZONE D-CC & ZONE E-CC W/ RESIDENTIAL OVERLAY
PROPOSED ZONING: ZONE D-CC & ZONE E-CC W/ RESIDENTIAL OVERLAY
- BENCHMARK: THE BENCHMARK FOR THIS SURVEY IS AN NSG BRASS DISK IN PVC PIP HAVING DESIGNATION HPGN D CA 04 KH, PID JT9617, AND HAVING A PUBLISHED NAVD88 ELEVATION OF 32.9 FEET (EPOCH 2010).
- EXISTING STRUCTURES: NONE
- EXISTING UTILITIES: EXISTING UTILITIES WITHIN THE PROPERTY BOUNDARY ARE TO REMAIN AND BE USED AS NEEDED
- STREETS: ALL DRIVE AISLES WITHIN THE PROJECT WILL BE PRIVATE AND WILL BE PRIVATELY MAINTAINED. (MINIMUM LONGITUDINAL SLOPE=0.5%)
- TREES: STREET TREES WILL BE INSTALLED PER THE CITY OF AMERICAN CANYON STANDARDS.
- STREET LIGHTS: STREET LIGHTS WILL BE INSTALLED PER THE CITY OF AMERICAN CANYON STANDARDS (OR APPROVED EQUAL).
- WALLS: ALL WALLS WILL BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.
- PRIVATE UTILITIES: PROPOSED STORM DRAIN FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- PUBLIC UTILITIES: PROPOSED ONSITE WATER AND SANITARY SEWER FACILITIES ARE PUBLIC AND WILL BE WITHIN A PUBLIC UTILITY EASEMENT. PROPOSED WATER AND SEWER FACILITIES WILL BE CONSTRUCTED PER CITY OF AMERICAN CANYON STANDARDS.
- LANDSCAPING: ALL LANDSCAPING WITHIN PROJECT BOUNDARY WILL BE PRIVATELY OWNED AND MAINTAINED.
- FLOOD ZONE: ZONE X: AREA OF MINIMAL FLOOD HAZARD.
SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FLOOD INSURANCE RATE MAP, MAP NUMBER 06055C0617F
DATE: AUGUST 3, 2016
- WELLS ONSITE: NONE
- UTILITIES:
WATER: CITY OF AMERICAN CANYON
SEWER: CITY OF AMERICAN CANYON
STORM DRAIN: CITY OF AMERICAN CANYON
GAS: PG&E
ELECTRIC: PG&E
TELEPHONE: AT&T
CABLE TV: COMCAST
- PHASING: PROJECT MAY BE CONSTRUCTED IN PHASES
- DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN

CONTACTS:

- DEVELOPER: CRP AFFORDABLE HOUSING & COMMUNITY DEVELOPMENT
4455 MORENA BLVD, SUITE #107
SAN DIEGO, CA 92117
(619) 483-4709
SHADY FAYED
- ENGINEER: CARLSON, BARBEE & GIBSON, INC.
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CALIFORNIA 94583
(925) 866-0322
COLT ALVERNAZ, RCE 75740
ANDREA BELLANCA, RCE 61806



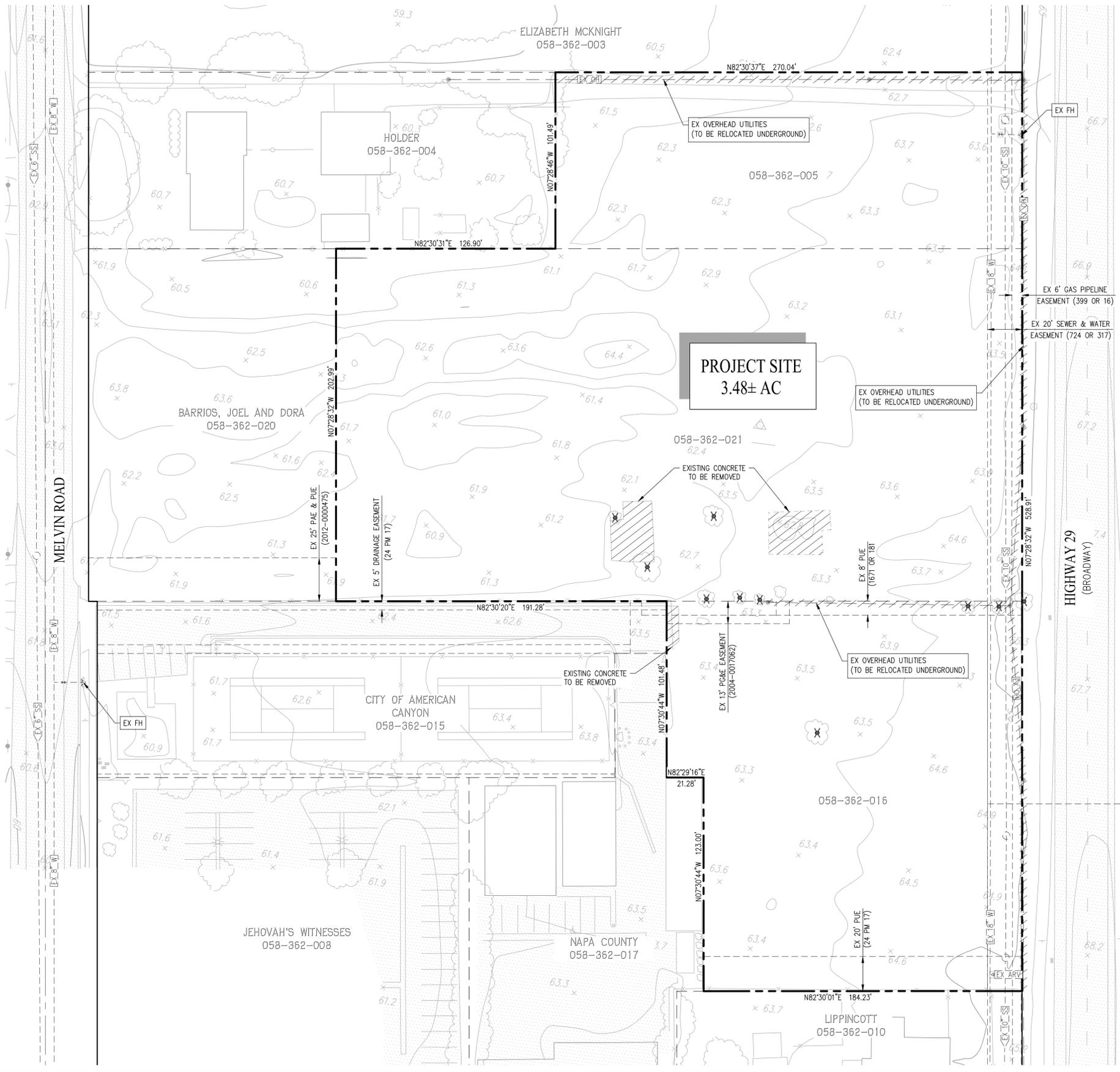
VICINITY MAP
NOT TO SCALE

ABBREVIATIONS

AC	ACRES	PAE	PUBLIC ACCESS EASEMENT
AU	ACCESSIBLE UNIT	PL	PROPERTY LINE
BD	BOUNDARY	PUE	PUBLIC UTILITY EASEMENT
CB	CATCH BASIN	PVC	POLYVINYL CHLORIDE
BRC	BACK OF ROLLED CURB	PSDE	PUBLIC STORM DRAIN EASEMENT
C	COMPACT	PVAW	PUBLIC VEHICLE ACCESS WAY
CC	CURB CUT	R	RADIUS
CL	CENTERLINE	RCP	REINFORCED CONCRETE PIPE
EC	ELECTROLIER	RW	RIGHT-OF-WAY
EL	ELEVATION	S	SLOPE
EX	EXISTING	SF	SQUARE FEET
FC	FACE OF CURB	SD	STORM DRAIN
FF	FINISHED FLOOR	SDMH	STORM DRAIN MANHOLE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FI	FIELD INLET	SSMH	SANITARY SEWER MANHOLE
FS	FIRE SERVICE	SW	SIDEWALK
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	TVC	TOP OF VERTICAL CURB
LF	LINEAR FEET	TC	TOP OF GRATE
LS	LANDSCAPE STRIP	TRC	TOP OF ROLLED CURB
MAX	MAXIMUM	TYP	TYPICAL
MH	MANHOLE	W	WATER
MIN	MINIMUM	WLE	WATER LINE EASEMENT
OB	OVERBUILD	WM	WATER METER
P	PAD		

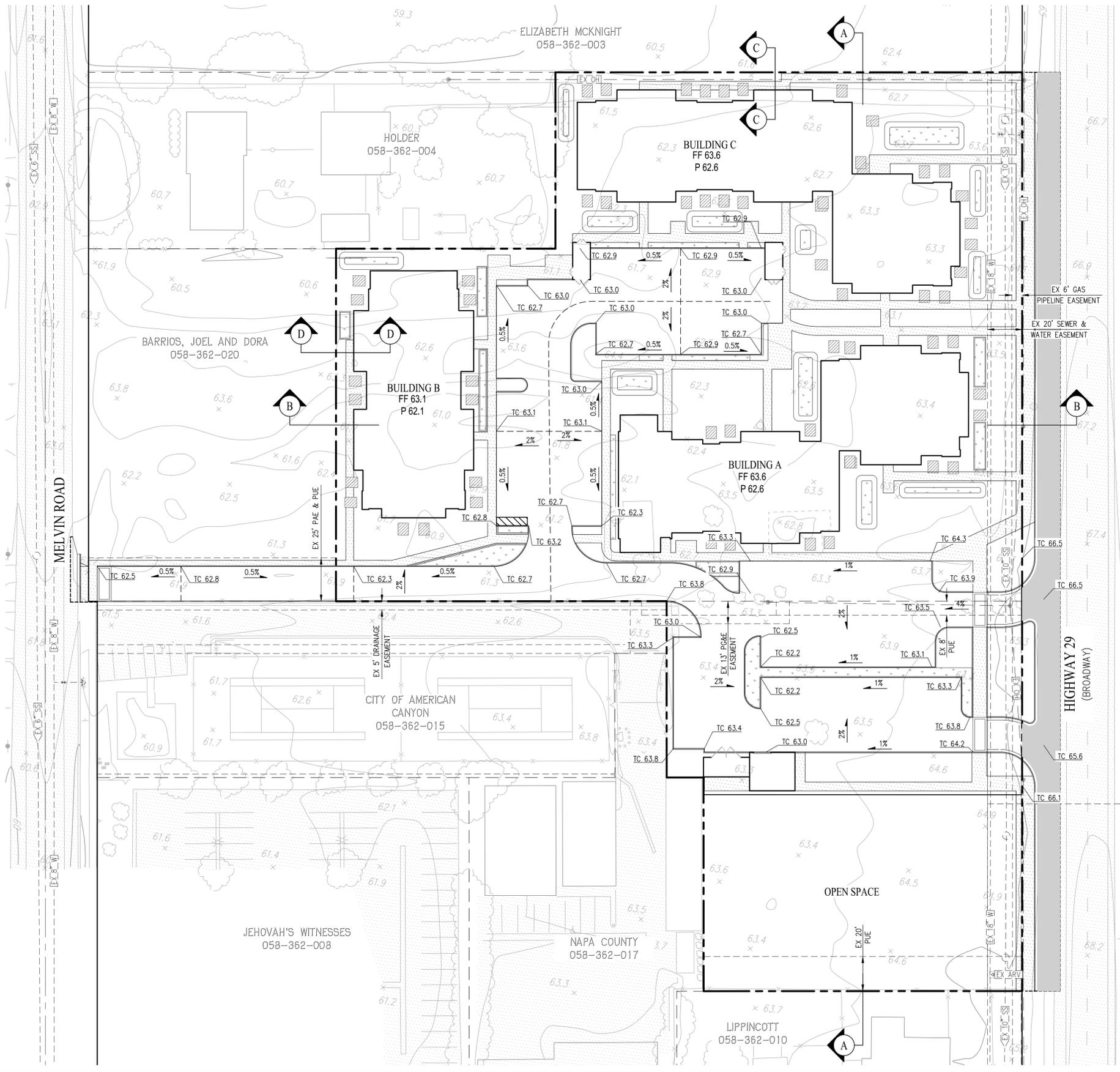
LEGEND

	EX PAVEMENT
	DECORATIVE PAVEMENT (SEE LANDSCAPE PLANS)
	PROPOSED PAVEMENT
	PROPOSED SIDEWALK
	LADDER PAD



LEGEND

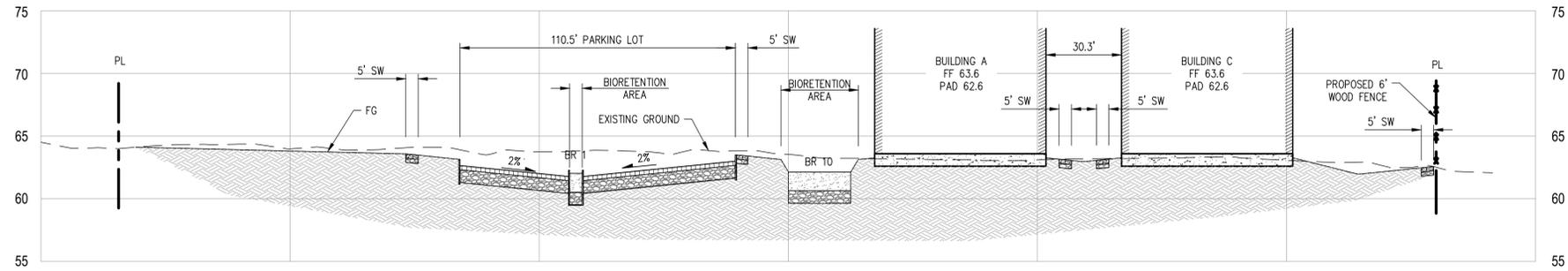
	EX OVERHEAD WIRE
	EX SANITARY SEWER PIPE
	EX WATER MAIN
	EX AIR RELEASE VALVE
	EX TREE TO BE REMOVED
	EX FIRE HYDRANT
	EX SANITARY SEWER MANHOLE
	DEMOLITION AREA



EARTHWORK SUMMARY		
DESCRIPTION	CUT (C.Y.)	FILL (C.Y.)
ROUGH GRADING	1,800	1,800

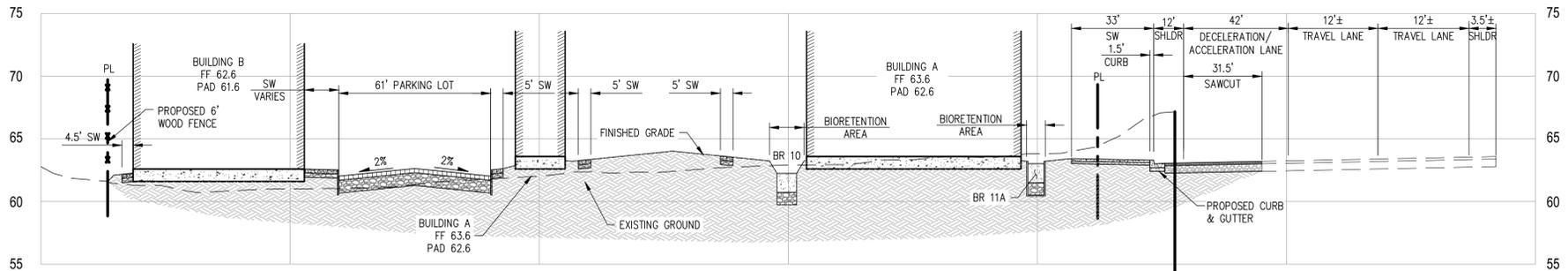
- EARTHWORK NOTES:**
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH UTILITY CONTRACTOR TO DETERMINE STREET UNDERCUT AND TO BALANCE SITE AS NEEDED. UTILITY CONTRACTOR TO DETERMINE ANTICIPATED SPOILS BASED ON CONSTRUCTION METHOD.
 - CONTRACTOR TO DETERMINE EARTHWORK QUANTITIES AND SHALL NOTIFY ENGINEER AND OWNER PRIOR TO STARTING CONSTRUCTION.
 - ADDITIONAL MATERIALS MAY BE REQUIRED TO BALANCE.
 - EARTHWORK QUANTITIES DO NOT INCLUDE ANY REMEDIAL GRADING AND/OR OVER-EXCAVATION THAT MAY BE NECESSARY.
 - EARTHWORK QUANTITIES ASSUME THAT SITE WILL BE PREVIOUSLY MASS GRADED.

- NOTES:**
- GRADING SECTION ARE SHOWN ON SHEET C-3.01.



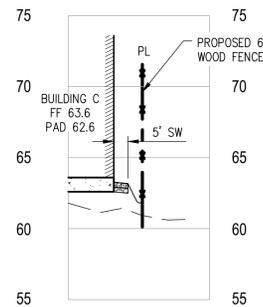
SECTION A-A

SCALE: HORIZONTAL 1" = 15'
VERTICAL 1" = 3'



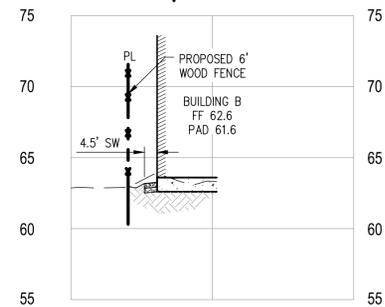
SECTION B-B

SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'



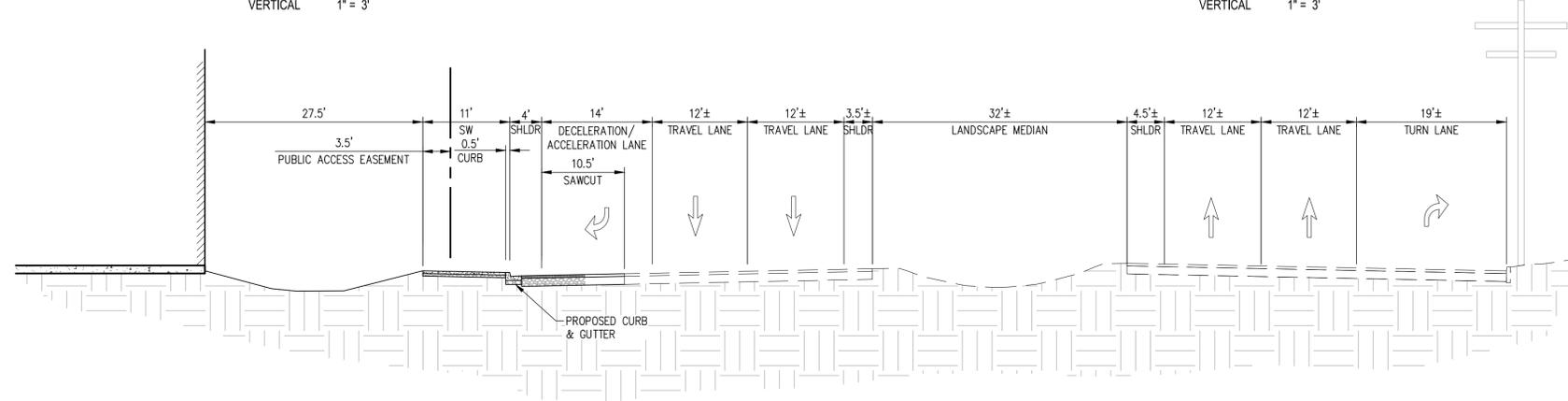
SECTION C-C

SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'



SECTION D-D

SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'



HIGHWAY 29 SECTION

SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'

NOTES:

- 1. SECTION LOCATIONS ARE SHOWN ON SHEET C-3.00

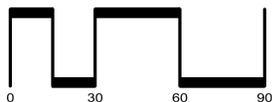
ENTITLEMENT SUBMITTAL
SEPTEMBER 17, 2021

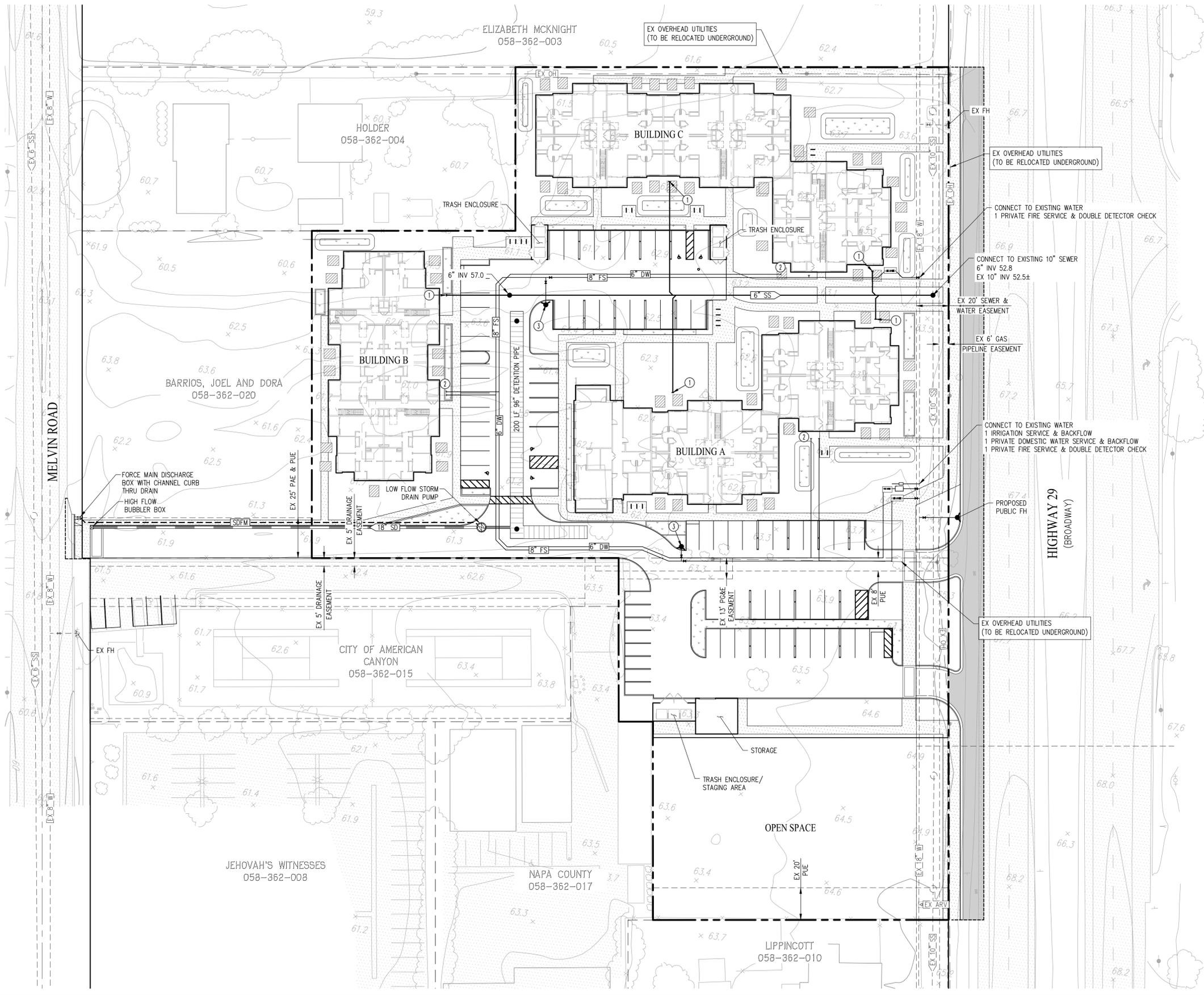


SAN RAMON (925) 866-0322
ROSEVILLE (916) 788-4456
WWW.CBANDG.COM

CRP Affordable Housing

PRELIMINARY GRADING SECTIONS C-3.01

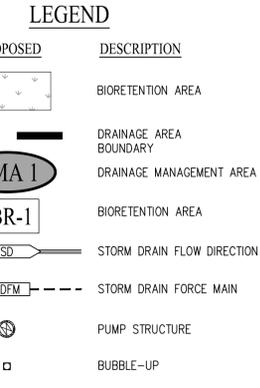
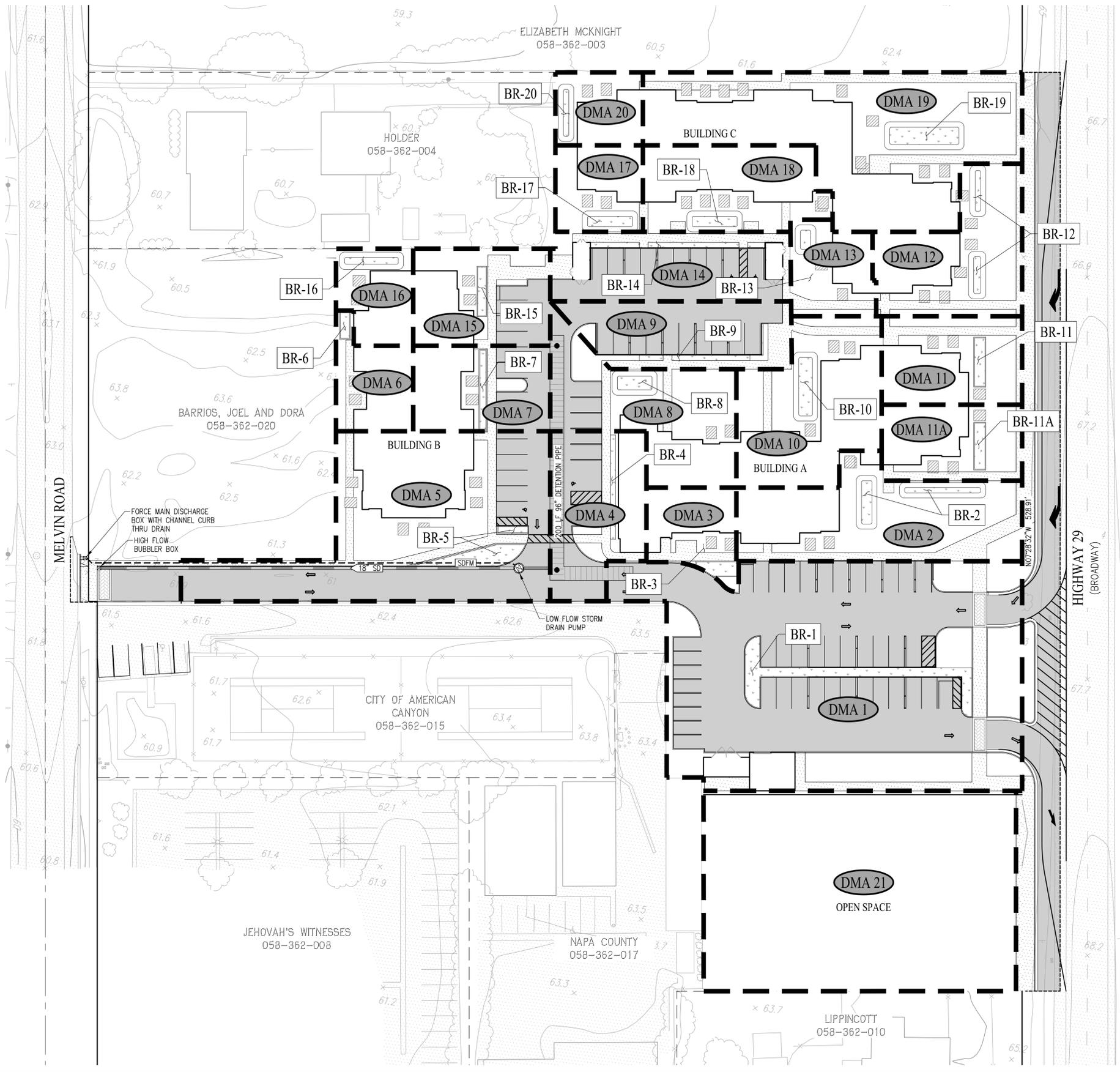




LEGEND

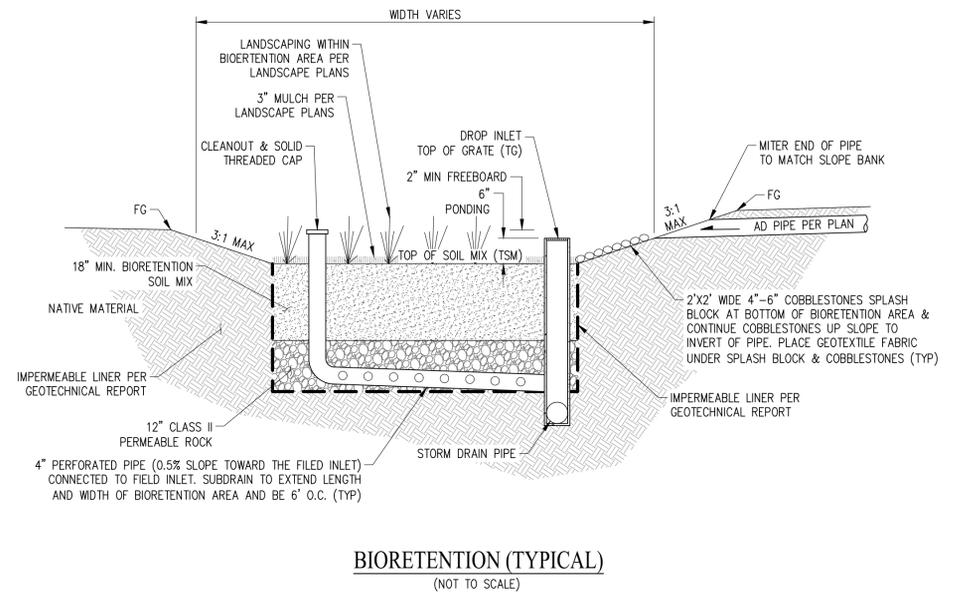
EXISTING	PROPOSED	DESCRIPTION
- EX 18" SD -	18" SD	STORM DRAIN PIPE
- EX 6" SS -	6" SS	SANITARY SEWER PIPE
- EX 8" W -	8" W	WATER MAIN
	6" DW	DOMESTIC WATER
	8" FS	FIRE SERVICE
▽ EX ARV	ARV	AIR RELEASE VALVE
	Sidewalk Symbol	SIDEWALK
	Fire Hydrant Symbol	FIRE HYDRANT
	Manhole Symbol	MANHOLE

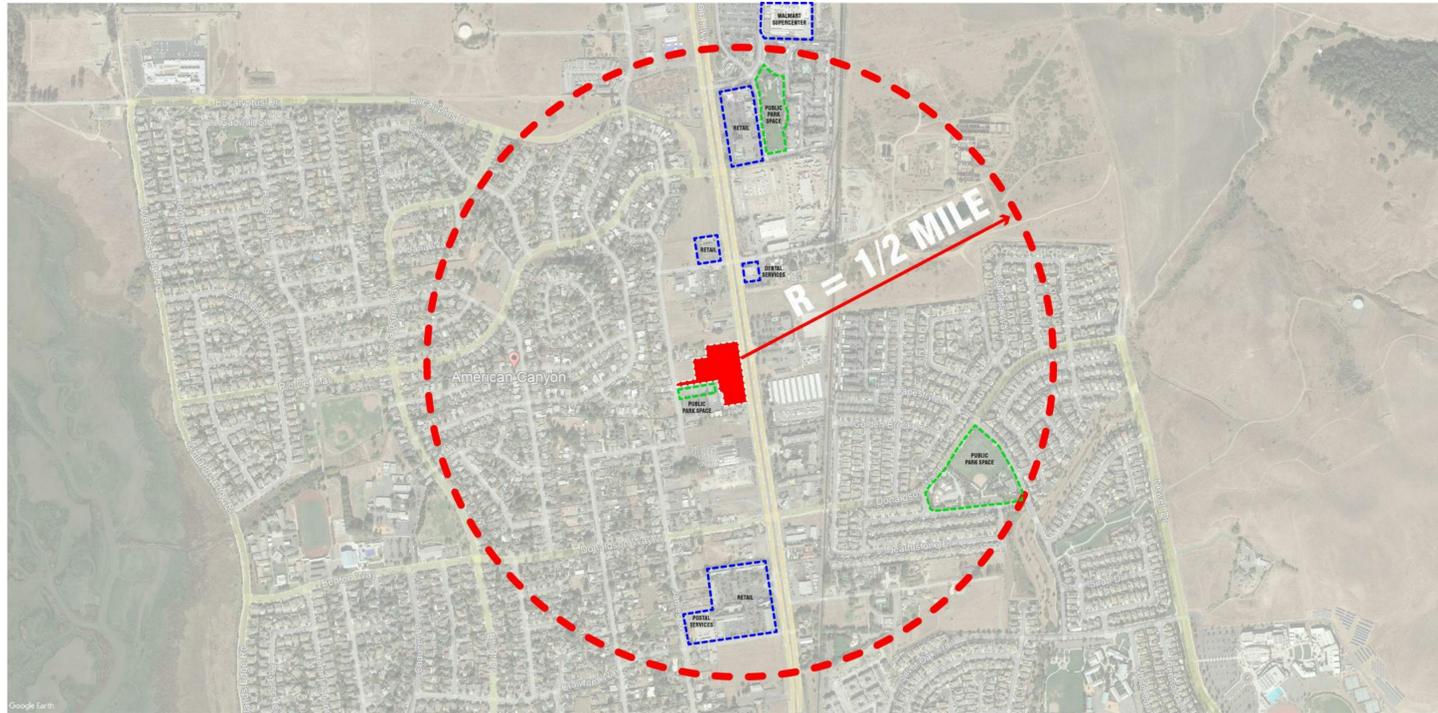
- NOTES**
- BUILDING SEWER POINT OF CONNECTION (SUBJECT TO CHANGE AT BUILDING PERMIT)
 - BUILDING DOMESTIC & FIRE WATER POINT OF CONNECTION (SUBJECT TO CHANGE AT BUILDING PERMIT)
 - PROPOSED PRIVATE FIRE HYDRANT



DRAINAGE MANAGEMENT AREA (DMA)	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	DRAINAGE AREA (SF)	REQUIRED TREATMENT AREA (SF)	PROVIDED TREATMENT AREA (SF)	TREATMENT TYPE
DMA 1	21,300	6,223	27,523	877	1,060	BIORETENTION
DMA 2	3,362	4,486	7,848	152	280	BIORETENTION
DMA 3	1,930	572	2,502	79	170	BIORETENTION
DMA 4	4,384	530	4,914	177	180	BIORETENTION
DMA 5	11,174	3,075	14,249	459	482	BIORETENTION
DMA 6	1,930	475	2,405	79	80	BIORETENTION
DMA 7	3,320	577	3,897	135	160	BIORETENTION
DMA 8	3,487	2,729	6,216	150	159	BIORETENTION
DMA 9	4,333	431	4,764	175	177	BIORETENTION
DMA 10	4,232	2,568	6,800	180	264	BIORETENTION
DMA 11	2,305	1,836	4,141	100	167	BIORETENTION
DMA 11A	2,227	1,328	3,555	94	160	BIORETENTION
DMA 12	2,568	3,001	5,569	115	160	BIORETENTION
DMA 13	1,049	1,457	2,506	48	65	BIORETENTION
DMA 14	4,941	603	5,544	200	273	BIORETENTION
DMA 15	3,179	1,253	4,432	132	133	BIORETENTION
DMA 16	1,364	926	2,290	58	123	BIORETENTION
DMA 17	1,292	1,229	2,521	57	155	BIORETENTION
DMA 18	3,416	1,623	5,039	143	155	BIORETENTION
DMA 19	8,302	5,231	13,533	353	399	BIORETENTION
DMA 20	1,155	974	2,129	50	80	BIORETENTION
DMA 21	-	21,244	21,244	-	-	SELF-TREATING

- ### NOTES
- VALUES IN THE TABLE ABOVE ARE ESTIMATED BASED UPON THE AVAILABLE INFORMATION AT THE TIME OF THIS MAP.
 - REQUIRED TREATMENT AREAS CALCULATED USING THE 4% RULE WITH A FACTOR OF 1.0 FOR IMPERVIOUS AREAS AND 0.1 FOR PERVIOUS AREAS (NAPA COUNTY IMP SIZING TOOL).





SITE CONTEXT MAP



View north on Broadway



View south on Broadway



Subject site



Subject site



BUS ROUTE - AMERICAN CANYON TRANSIT (MONDAY - FRIDAY)

NOTE: INFORMATION EXTRACTED FROM VINETRANSIT.COM/ROUTES

VINE TRANSIT LINE 11
 4 TOTAL STOPS W/IN 1/2 MILE RADIUS
 - 24 TOTAL MORNING (AM) NORTHBOUND STOPS
 - 24 TOTAL MORNING (AM) SOUTHBOUND STOPS
 - 36 TOTAL AFTERNOON (PM) NORTHBOUND STOPS
 - 36 TOTAL AFTERNOON (PM) SOUTHBOUND STOPS

VINE TRANSIT LINE 11X
 - 3 TOTAL MORNING (AM) NORTHBOUND STOPS
 - 3 TOTAL MORNING (AM) SOUTHBOUND STOPS
 - 4 TOTAL AFTERNOON (PM) NORTHBOUND STOPS
 - 3 TOTAL AFTERNOON (PM) SOUTHBOUND STOPS

VINE TRANSIT LINE 29
 - 7 TOTAL MORNING (AM) NORTHBOUND STOPS
 - 7 TOTAL MORNING (AM) SOUTHBOUND STOPS
 - 1 TOTAL AFTERNOON (PM) NORTHBOUND STOPS
 - 7 TOTAL AFTERNOON (PM) SOUTHBOUND STOPS



Subject site



Subject site



Nearby Single-Family Home



Nearby Single-Family Homes



Nearby Nursery



Nearby Commercial



Nearby Single-Family Home



Nearby Single-Family Homes



Nearby Commercial



Nearby Hotel



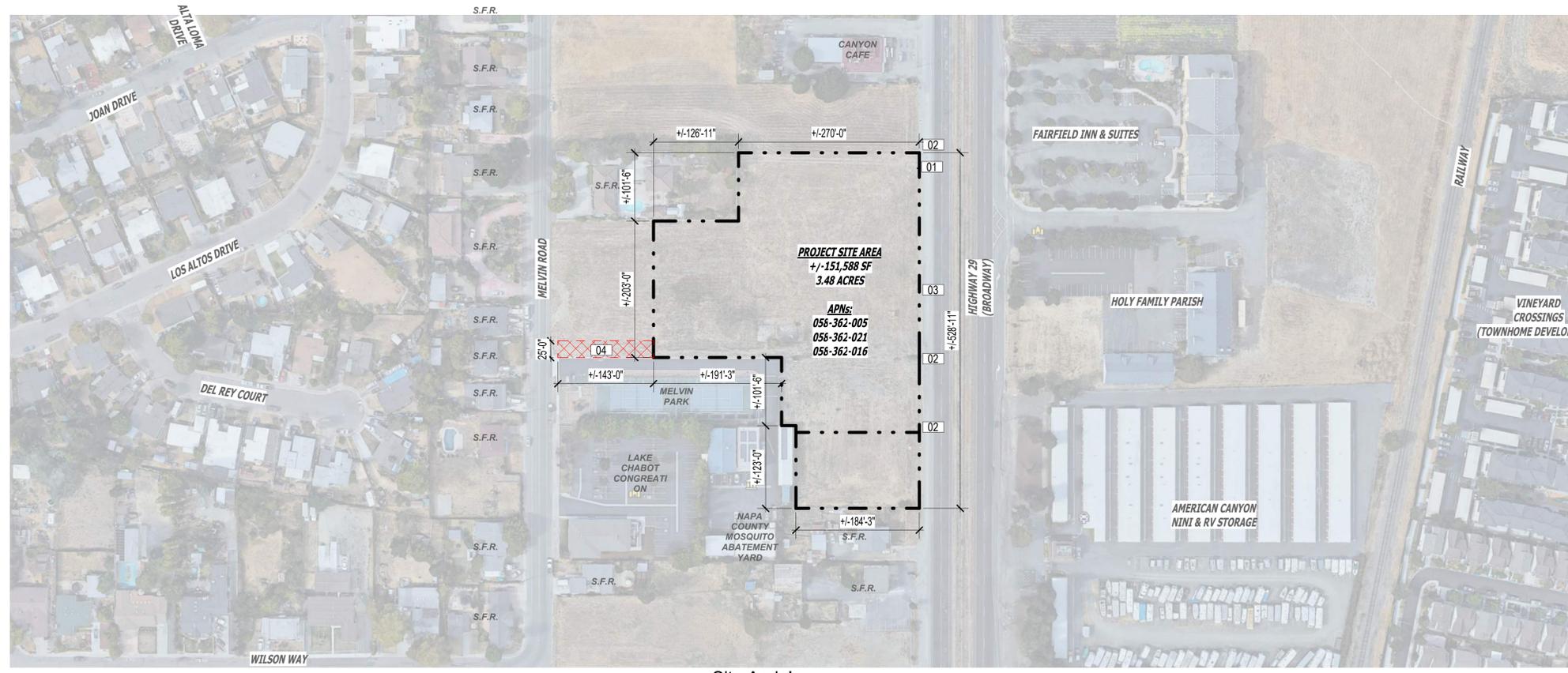
Nearby House of Worship



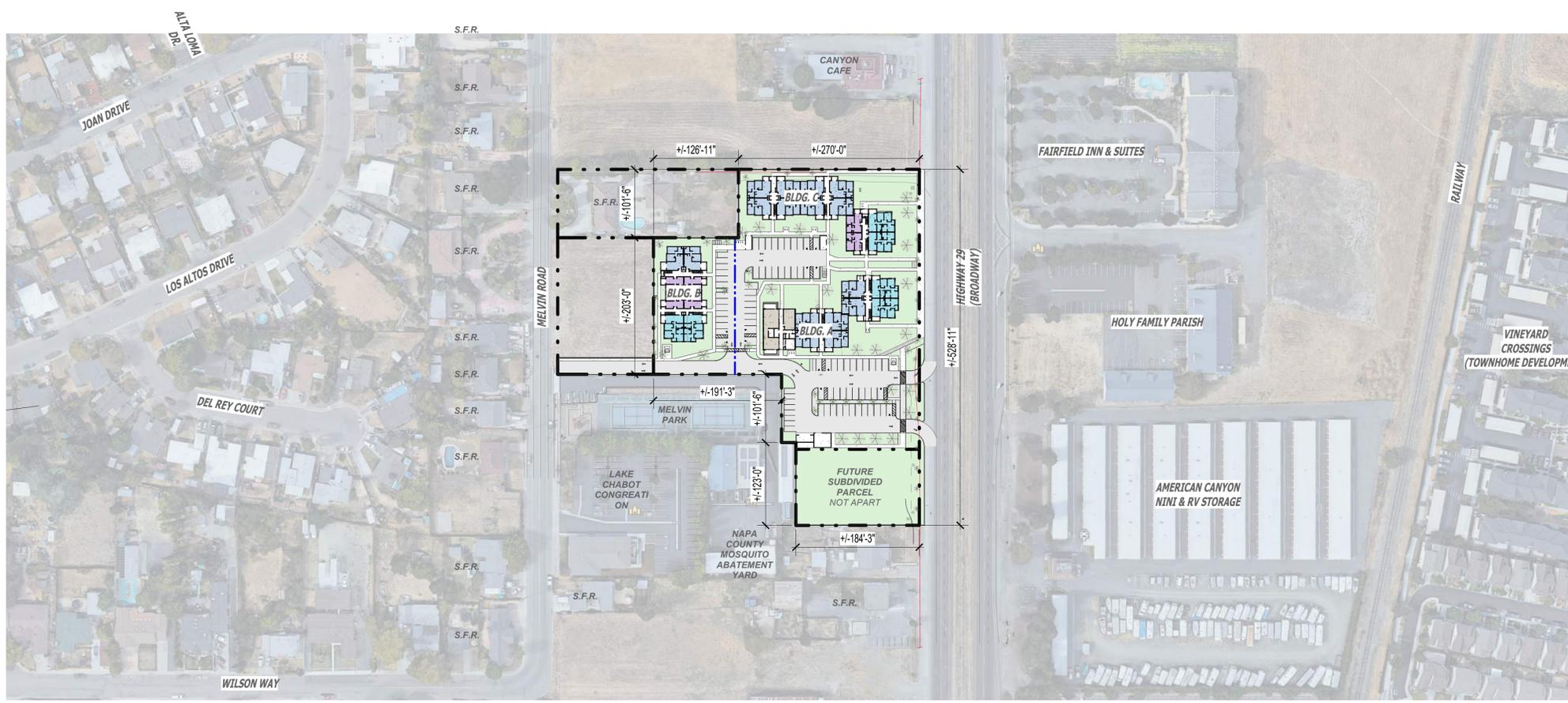
Nearby Park

KEYNOTES

- 01 (E) FIRE HYDRANT TO BE RELOCATED SOUTH PER CIVIL DWGS.
- 02 (E) POWER POLE AND LINES TO REMAIN IN PLACE
- 03 (E) POWER POLE TO BE DEMOLISHED; LINES TO BE PLACED UNDERGROUND
- 04 ACCESS EASEMENT PER SITE SURVEY & TITLE REPORT



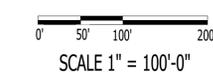
Site Aerial

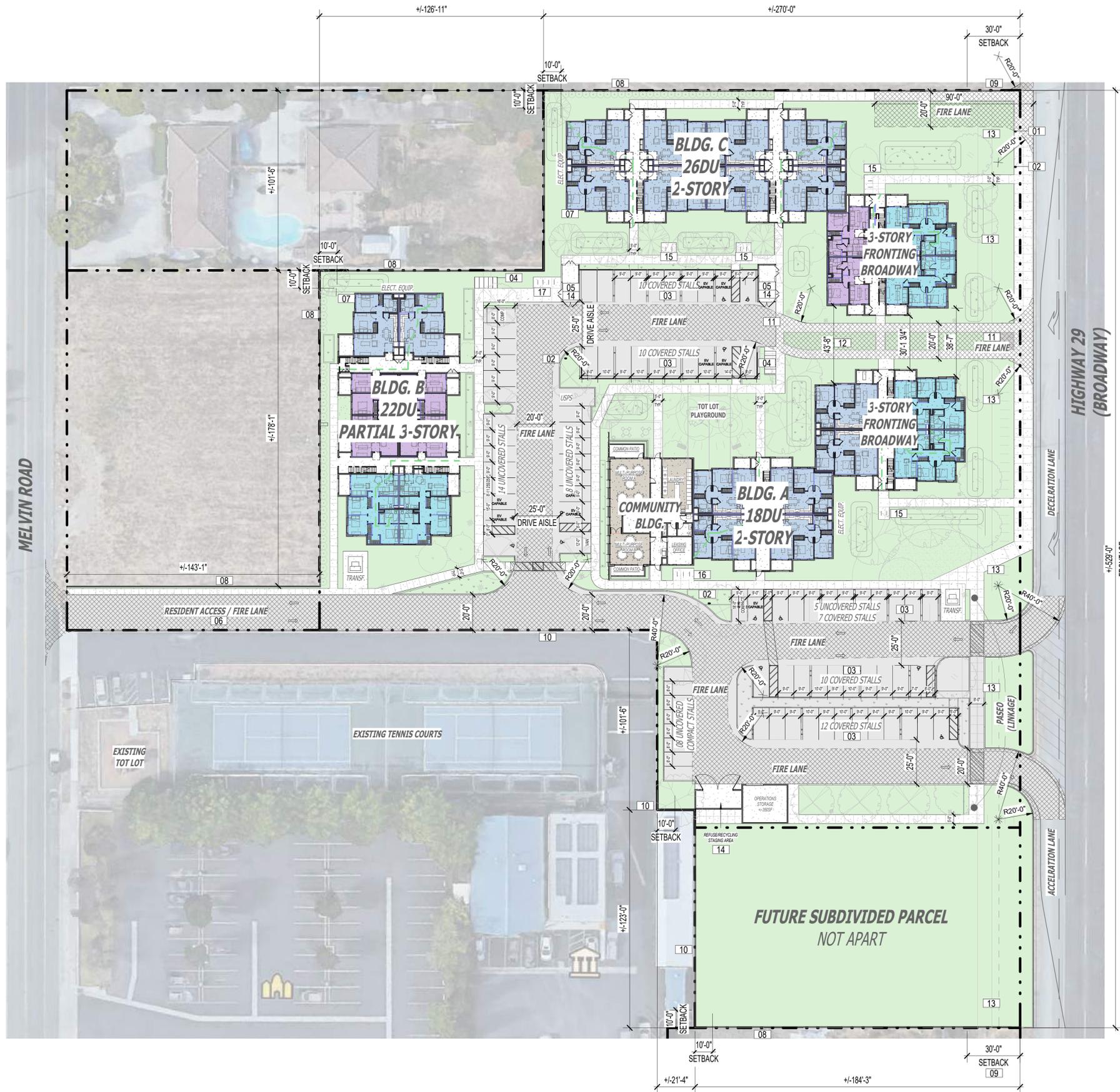


Site Plan

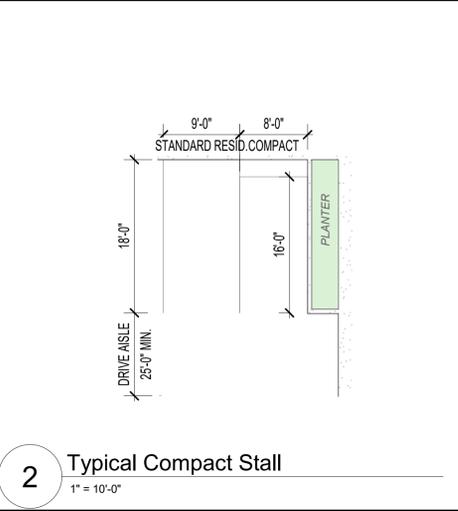
HATCH LEGEND

	COMMON BUILDING		1 BEDROOM UNIT (XXXXSF)
	2 BEDROOM UNIT (XXXXSF)		3 BEDROOM UNIT (XXXXSF)





TYPICAL PARKING DIMENSIONS



PROJECT INFORMATION

PROJECT NAME: NAPA COVE APARTMENTS
ADDRESS: BROADWAY ROAD, AMERICAN CANYON, CA 94503
OWNER / APPLICANT: CRP AFFORDABLE GROUP
APNs: 058-362-005 / 058-362-021 / 058-362-016
LOT AREA: +/-151,489 SF / +/-3.48 ACRES (PER SURVEY)
PROJECT DESCRIPTION: CAMPUS STYLE, MULTI-FAMILY DEVELOPMENT CONSISTING OF 66 DWELLING UNITS ACROSS 3 RESIDENTIAL BUILDINGS (2 & 3 STORIES) OF TYPE V-A CONSTRUCTION. SURFACE PARKING PROVIDED THROUGHOUT PROPERTY.
AFFORDABLE UNIT COUNT: MULTI-FAMILY DEVELOPMENT CONSISTS OF 100% AFFORDABLE DWELLING UNITS EXCLUDING ONE MANAGER UNIT.
CONSTRUCTION TYPE: TYPE V-A
OCCUPANCY: R2 & B OCCUPANCIES
ZONING: BASE ZONING: COMMUNITY COMMERCIAL (W/ RESIDENTIAL OVERLAY)
SPECIFIC PLAN AREA: BROADWAY DISTRICT SPECIFIC PLAN - BROADWAY RESIDENTIAL
ALLOWABLE BLDG HEIGHT: 42 FEET W/ 30FT SETBACK
PROPOSED BLDG HEIGHT: 34' - 11"
SETBACKS (REQUIRED):
 BROADWAY R.O.W. 30 FEET OFF BROADWAY R.O.W.
 MELVIN ROAD R.O.W. 15 FEET OFF MELVIN ROAD R.O.W.
 MIN. SIDE YARD 10 FEET
 MIN. REAR YARD 10 FEET
PROPOSED DENSITY:

UNIT TYPE	SQUARE FOOTAGE	QUANTITY	MIX PERCENTAGE
1 BEDROOM UNIT	638 SF	16	24%
2 BEDROOM UNIT	891 SF	32	49%
3 BEDROOM UNIT	1,105 SF	18	27%
TOTAL UNITS			66

ADA UNITS: 10 UNITS
 (3) 1-BEDROOM UNITS
 (4) 2-BEDROOM UNITS
 (3) 3-BEDROOM UNITS

COMMUNICATION (HV1) UNITS: 7 UNITS
 (2) 1-BEDROOM UNITS
 (3) 2-BEDROOM UNITS
 (2) 3-BEDROOM UNITS

UNIT TOTALS

UNIT TOTALS - BUILDING A

BUILDING	UNIT TYPE	QUANTITY
A	2 BEDROOM UNIT	12
A	3 BEDROOM UNIT	6
		18

UNIT TOTALS - BUILDING B

BUILDING	UNIT TYPE	QUANTITY
B	1 BEDROOM UNIT	12
B	2 BEDROOM UNIT	4
B	3 BEDROOM UNIT	6
		22

UNIT TOTALS - BUILDING C

BUILDING	UNIT TYPE	QUANTITY
C	1 BEDROOM UNIT	4
C	2 BEDROOM UNIT	16
C	3 BEDROOM UNIT	6
		26

KEYNOTES

- 01 (E) FIRE HYDRANT TO BE RELOCATED SOUTH PER CIVIL DWGS.
- 02 NEW FIRE HYDRANT PROPOSED
- 03 CARPORT PROVIDED ABOVE STALLS
- 04 (5) BICYCLE LOCKERS
- 05 PROPOSED REFUSE/RECYCLING STORAGE
- 06 ACCESS EASEMENT UTILIZED FOR SECONDARY RESIDENT AND EMERGENCY ACCESS
- 07 2-STORY BUILDING HEIGHT ADJACENT TO SINGLE FAMILY PROPERTY
- 08 NEW 6FT HIGH WOOD "GOOD NEIGHBOR" PERIMETER FENCE; PER LANDSCAPE DWGS.
- 09 NEW "GOOD NEIGHBOR" PERIMETER FENCE TO COMPLY W/ 42-INCH HEIGHT REQUIREMENT PER AMCAN ZONING
- 10 EXISTING CHAIN LINK FENCE TO REMAIN; SEE LANDSCAPE DWGS.
- 11 NEW BOLLARDS AT FIRE LANE ENTRANCE/EXIT; SEE LANDSCAPE DWGS FOR DETAILS
- 12 TURF-BLOCK AT FIRE LANE
- 13 NEW 3-RAIL FENCING; SEE LANDSCAPE DWGS. FOR DETAILS
- 14 OWNERSHIP TO PROVIDE BIN TRANSFER TO STAGING AREA; SEE WASTE MANAGEMENT PLAN FOR TRUCK ACCESS AND TURN RADIUS
- 15 (2) BICYCLE RACKS - SUPPORTING 4 BICYCLES
- 16 (3) BICYCLE RACKS - SUPPORTING 4 BICYCLES
- 17 (4) BICYCLE RACKS - SUPPORTING 8 BICYCLES

HATCH LEGEND

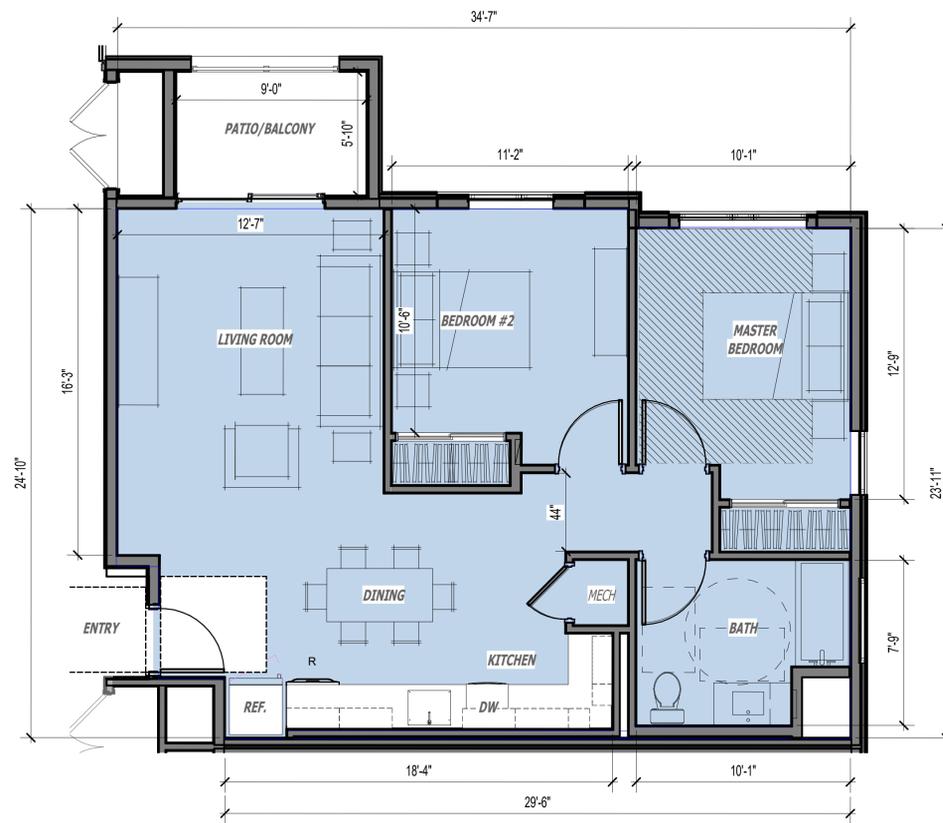
	COMMON BUILDING		1 BEDROOM UNIT (XXXXSF)
			2 BEDROOM UNIT (XXXXSF)
			3 BEDROOM UNIT (XXXXSF)

XXXX BROADWAY | AMERICAN CANYON, CA |
 11/8/2021 2:10:58 PM



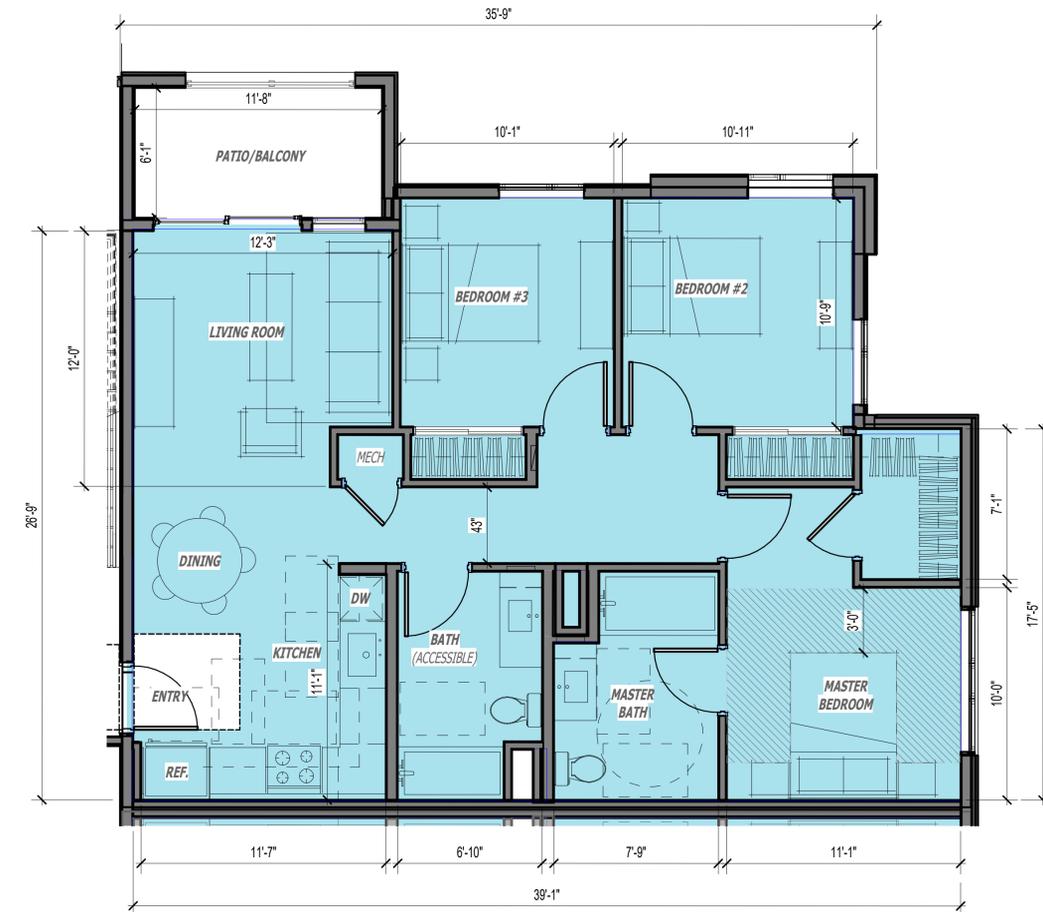
Unit Plan - 1BDR

NET RENTABLE - 638SF



Unit Plan - 2BDR

NET RENTABLE - 891SF

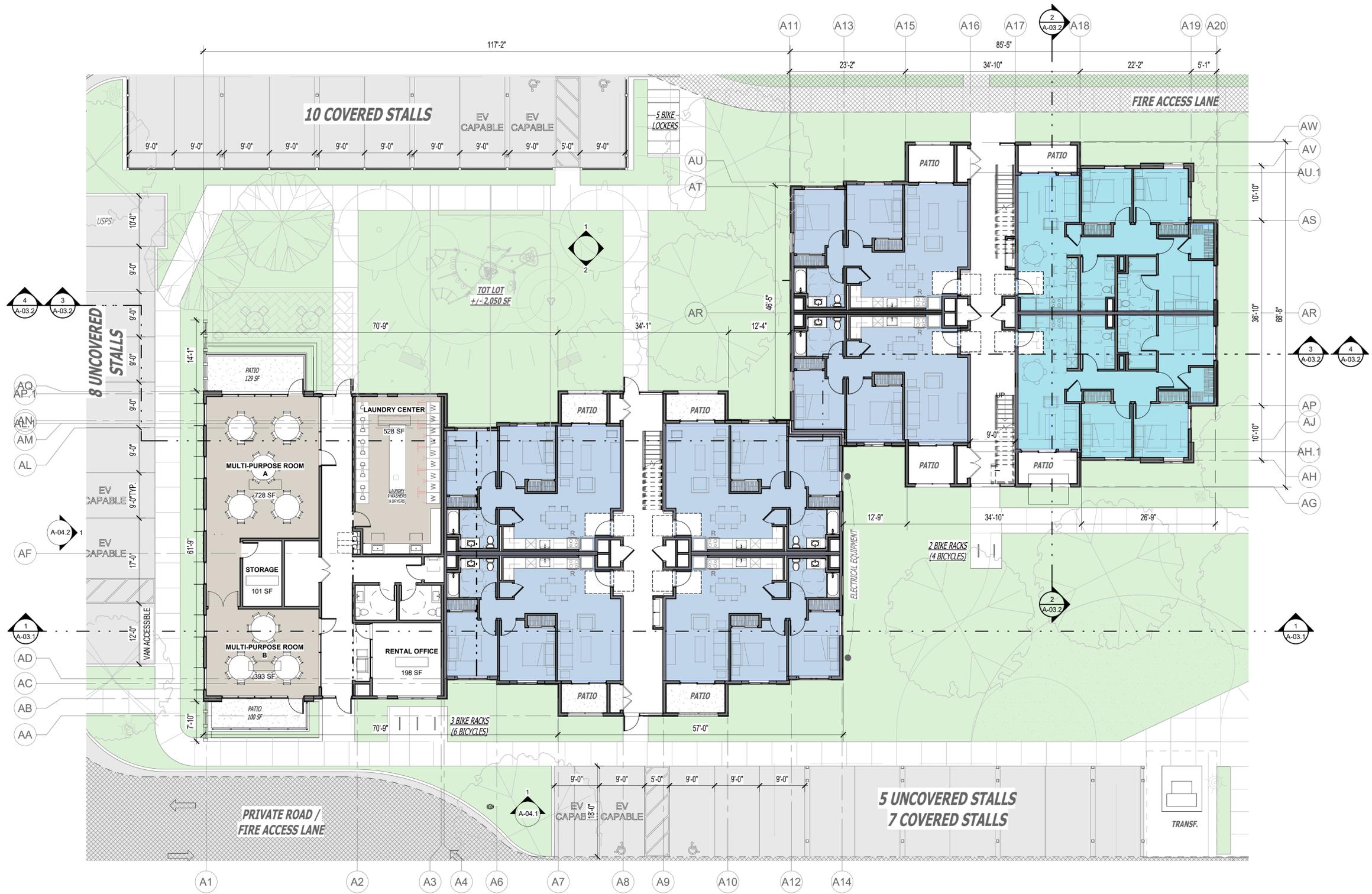


Unit Plan - 3BDR

NET RENTABLE - 1,105SF



SCALE 1" = 4'-0"

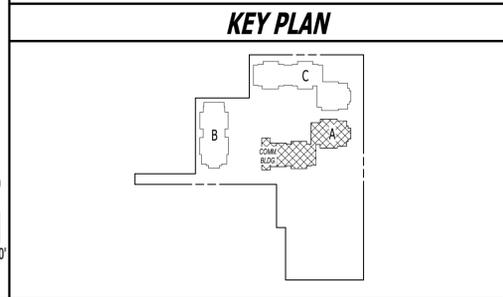


UNIT TOTALS - BUILDING A

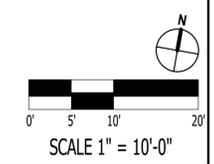
BUILDING	UNIT TYPE	QUANTITY
A	2 BEDROOM UNIT	8
A	2 BEDROOM UNIT COMMUNICATION	2
A	2 BEDROOM UNIT MOBILITY	2
A	3 BEDROOM UNIT	5
A	3 BEDROOM UNIT MOBILITY & COMMUNICATION	1
	TOTAL	18

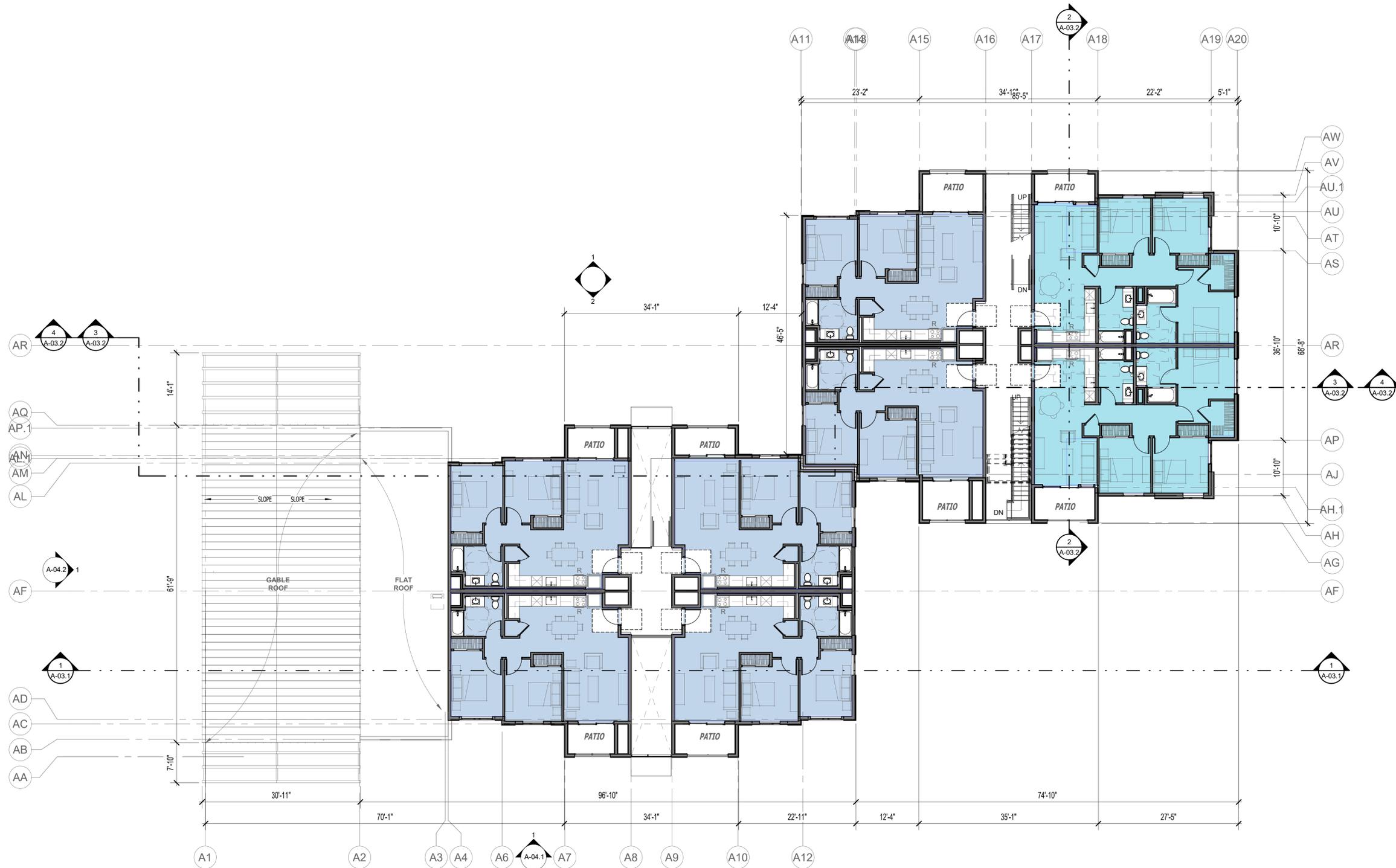
HATCH LEGEND

	COMMON BUILDING		1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)		3 BEDROOM UNIT (1,005SF)



Building A Plan - Level 1



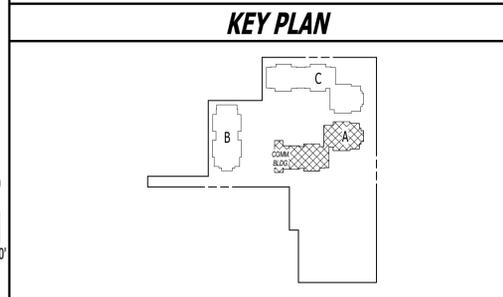


UNIT TOTALS - BUILDING A

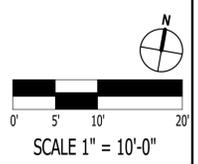
BUILDING	UNIT TYPE	QUANTITY
A	2 BEDROOM UNIT	8
A	2 BEDROOM UNIT COMMUNICATION	2
A	2 BEDROOM UNIT MOBILITY	2
A	3 BEDROOM UNIT	5
A	3 BEDROOM UNIT MOBILITY & COMMUNICATION	1
		18

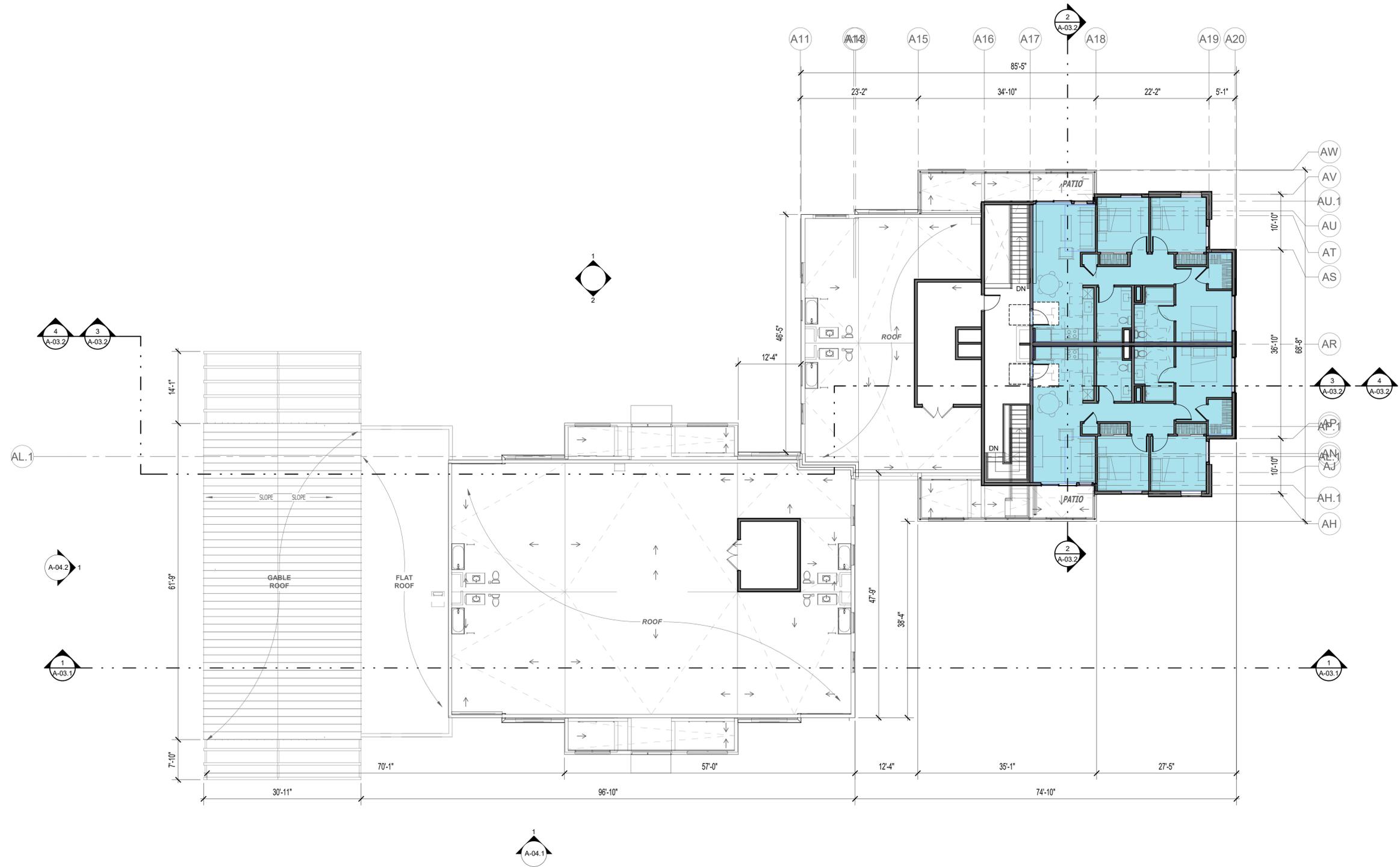
HATCH LEGEND

	1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)
	3 BEDROOM UNIT (1,005SF)



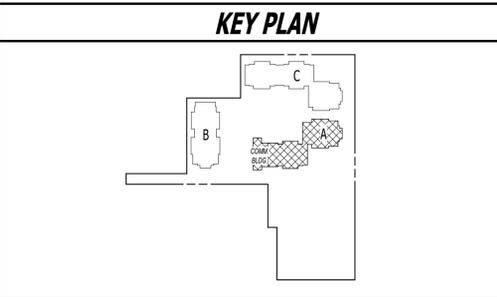
Building A Plan - Level 2



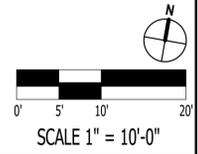


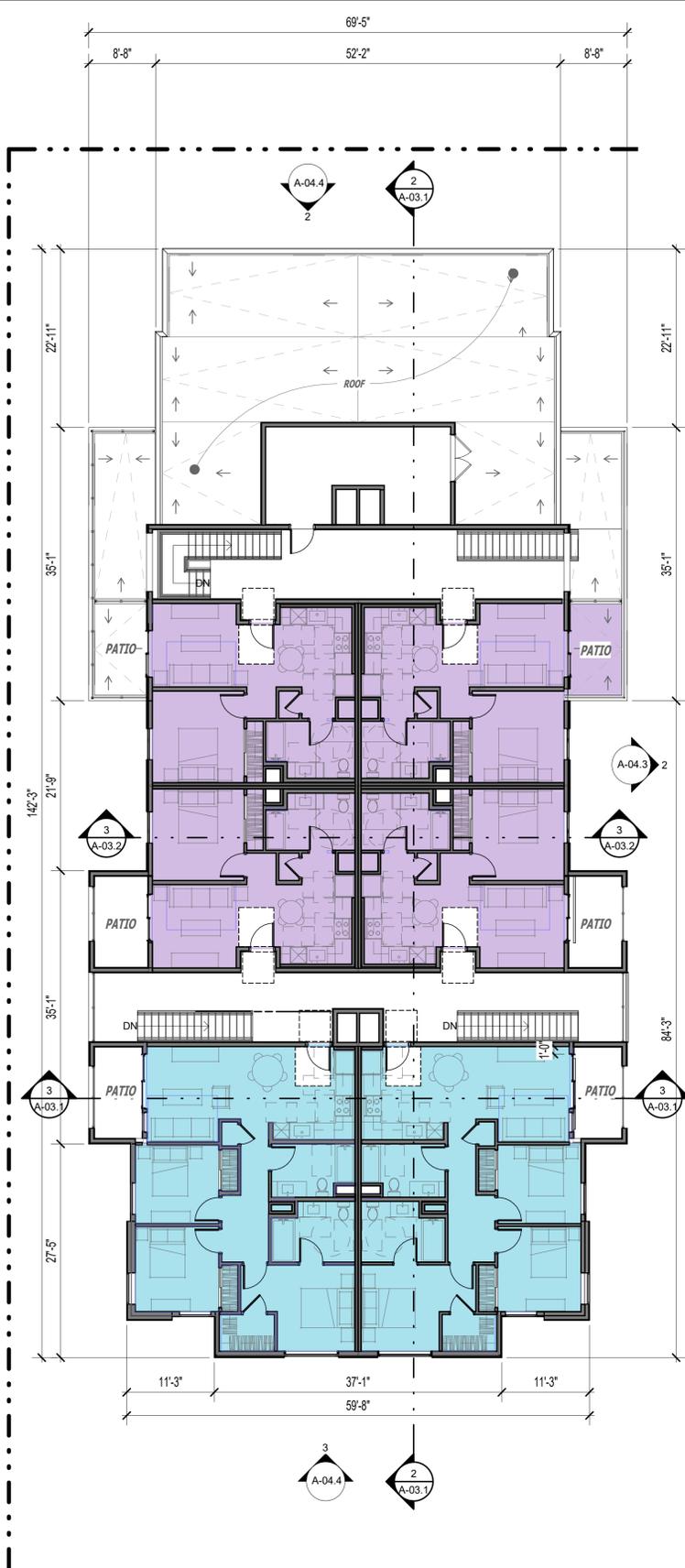
UNIT TOTALS - BUILDING A		
BUILDING	UNIT TYPE	QUANTITY
A	2 BEDROOM UNIT	8
A	2 BEDROOM UNIT COMMUNICATION	2
A	2 BEDROOM UNIT MOBILITY	2
A	3 BEDROOM UNIT	5
A	3 BEDROOM UNIT MOBILITY & COMMUNICATION	1
		18

HATCH LEGEND	
	COMMON BUILDING
	1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)
	3 BEDROOM UNIT (1,005SF)

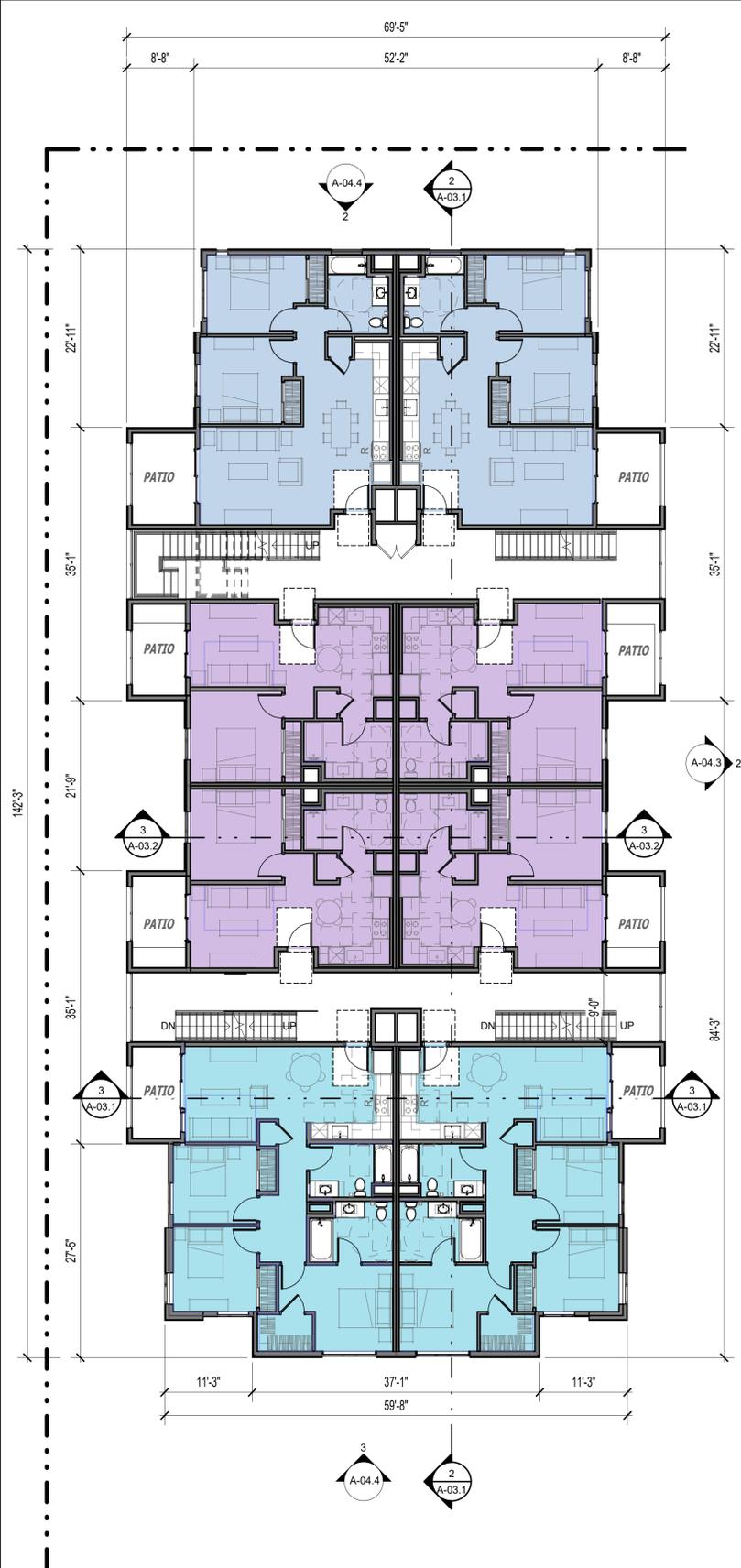


Building A Plan - Level 3

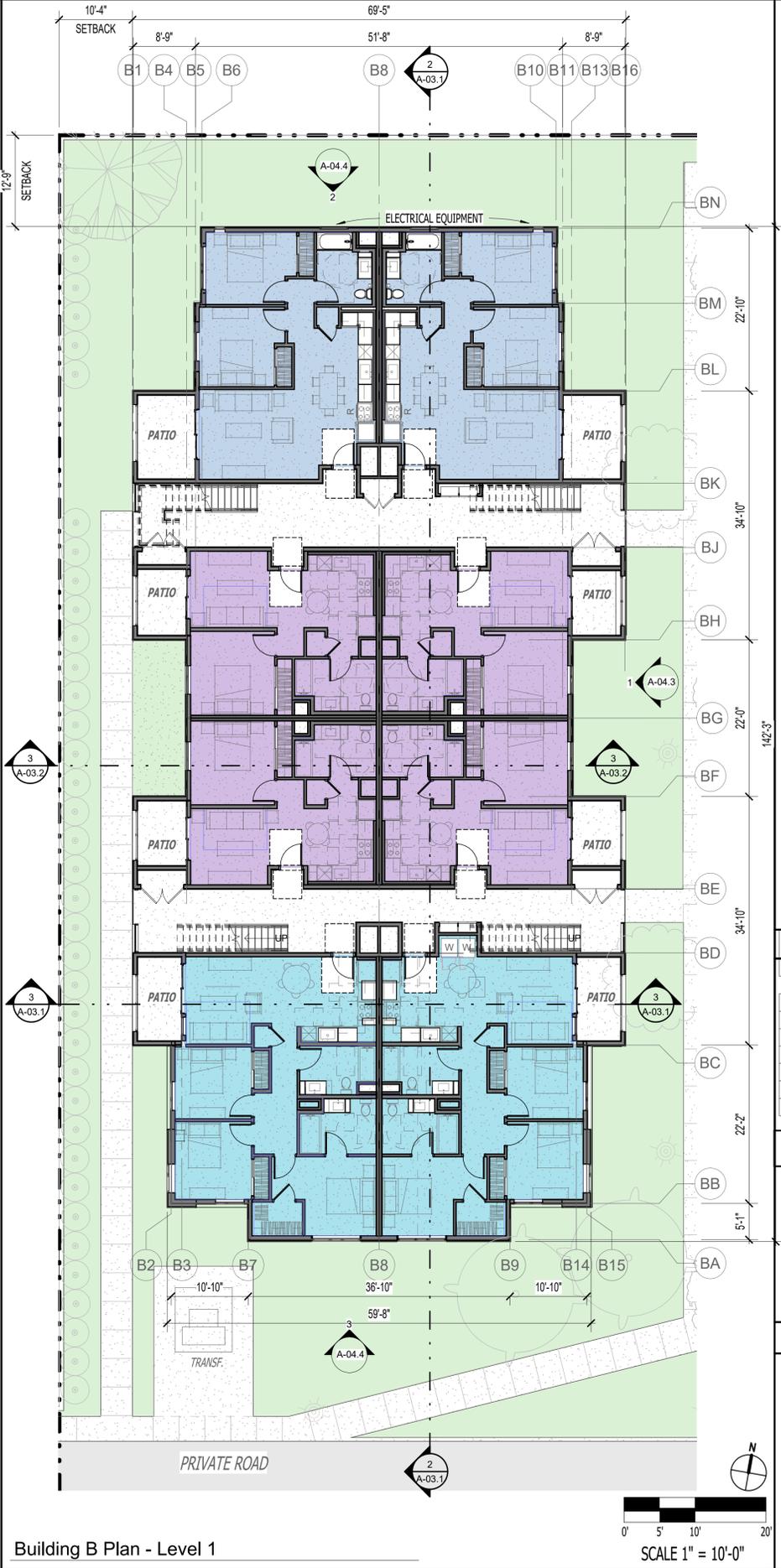




Building B Plan - Level 3



Building B Plan - Level 2



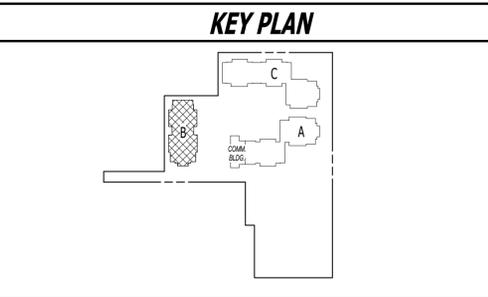
Building B Plan - Level 1

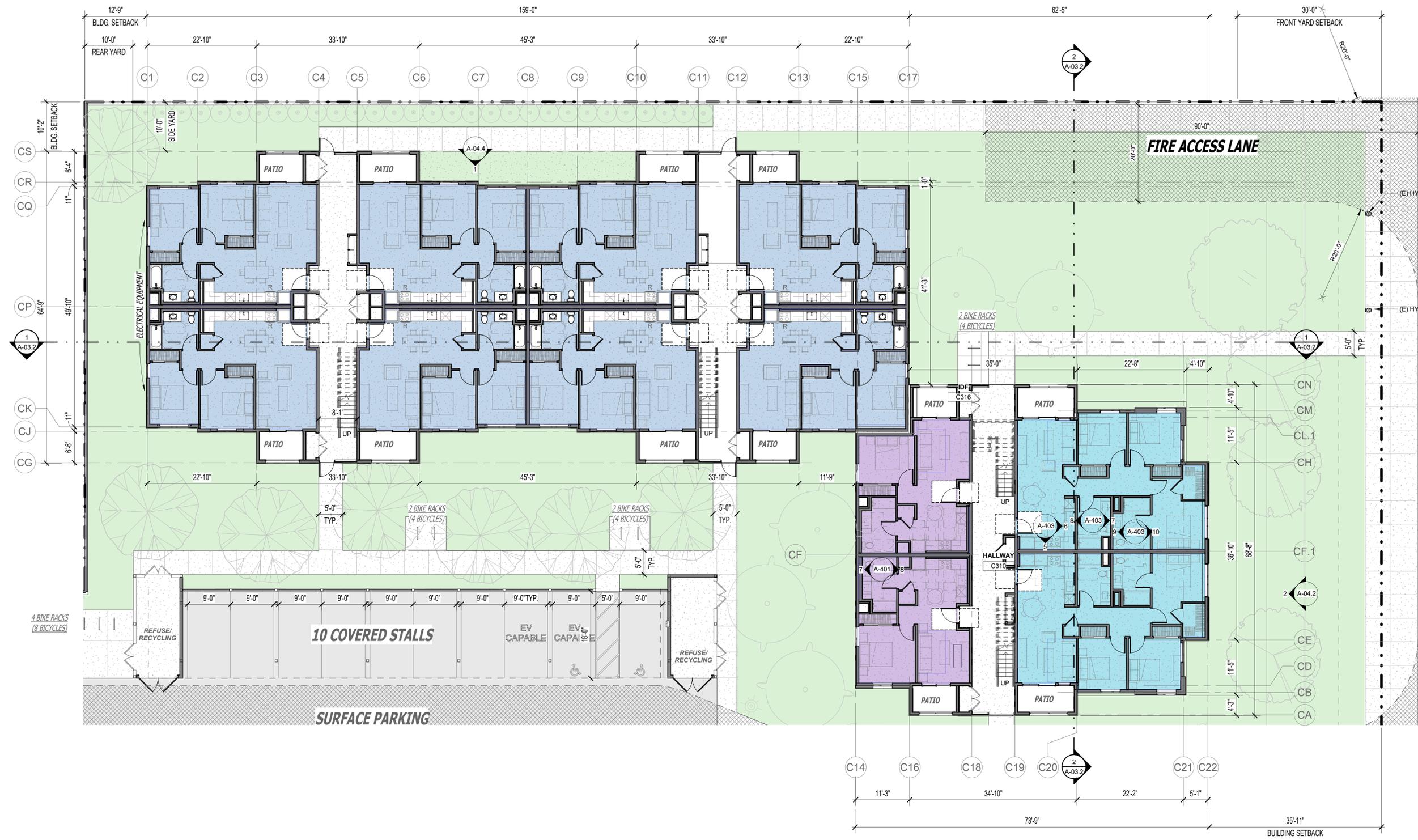
UNIT TOTALS - BUILDING B

BUILDING	UNIT TYPE	QUANTITY
B	1 BEDROOM UNIT	9
B	1 BEDROOM UNIT COMMUNICATION	1
B	1 BEDROOM UNIT MOBILITY	2
B	2 BEDROOM UNIT	3
B	2 BEDROOM UNIT MOBILITY & COMMUNICATION	1
B	3 BEDROOM UNIT	5
B	3 BEDROOM UNIT MANAGER'S UNIT MOBILITY & COMMUNICATION	1
	TOTAL	22

HATCH LEGEND

	1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)
	3 BEDROOM UNIT (1,005SF)



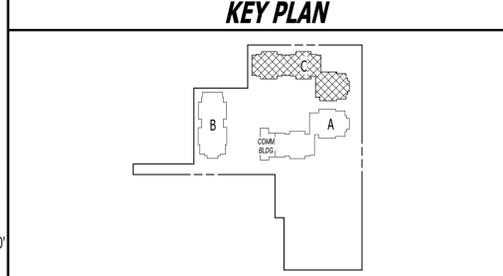


UNIT TOTALS - BUILDING C

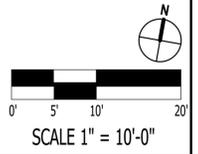
BUILDING	UNIT TYPE	QUANTITY
C	1 BEDROOM UNIT	3
C	1 BEDROOM UNIT MOBILITY & COMMUNICATION	1
C	2 BEDROOM UNIT	13
C	2 BEDROOM UNIT COMMUNICATION	1
C	2 BEDROOM UNIT MOBILITY	2
C	3 BEDROOM UNIT	5
C	3 BEDROOM UNIT MOBILITY	1
	TOTAL	26

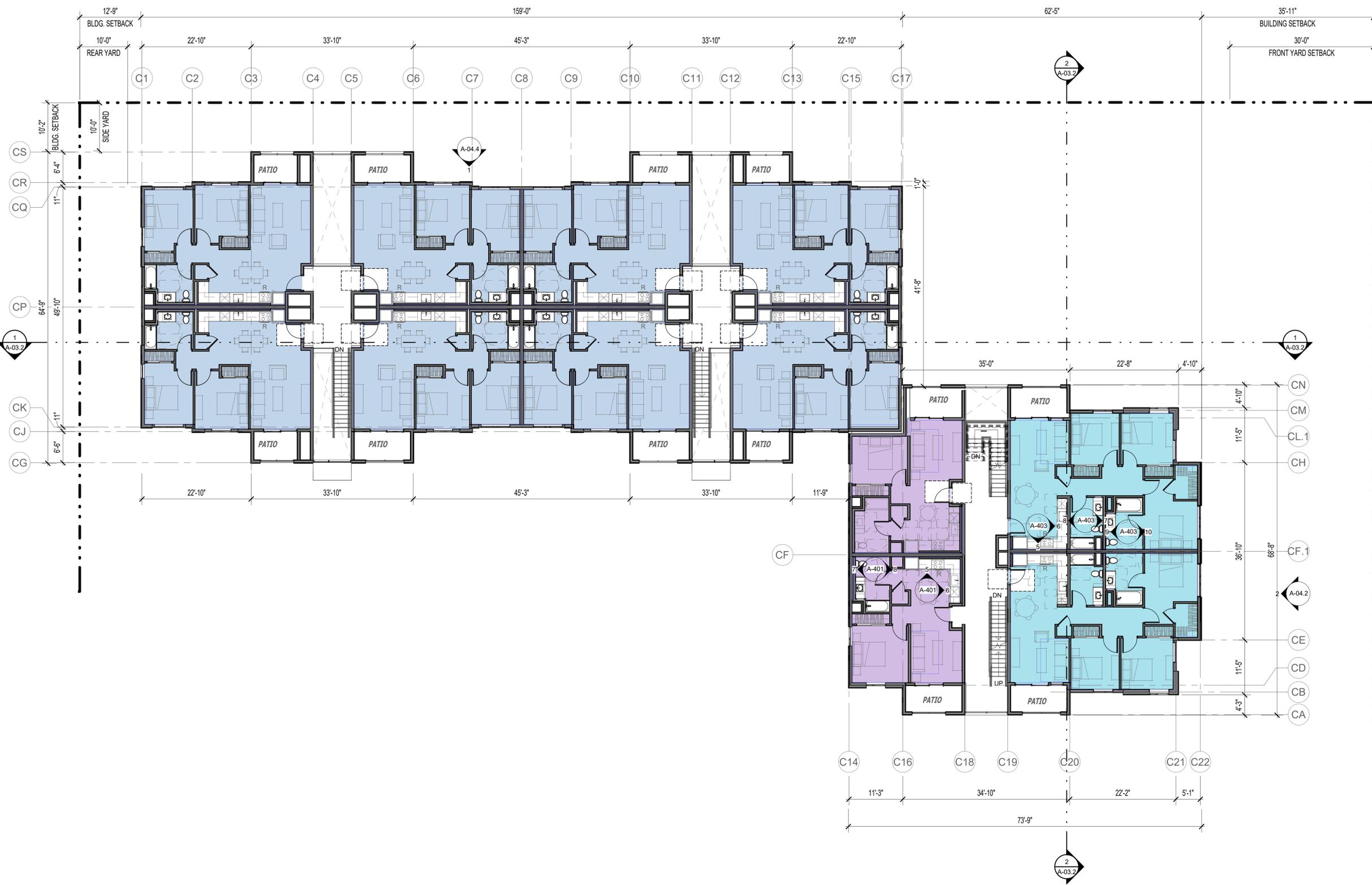
HATCH LEGEND

	COMMON BUILDING
	1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)
	3 BEDROOM UNIT (1,005SF)



Building C Plan - Level 1

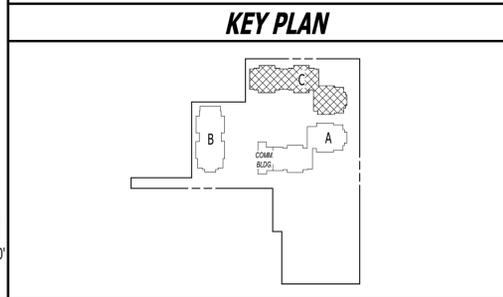


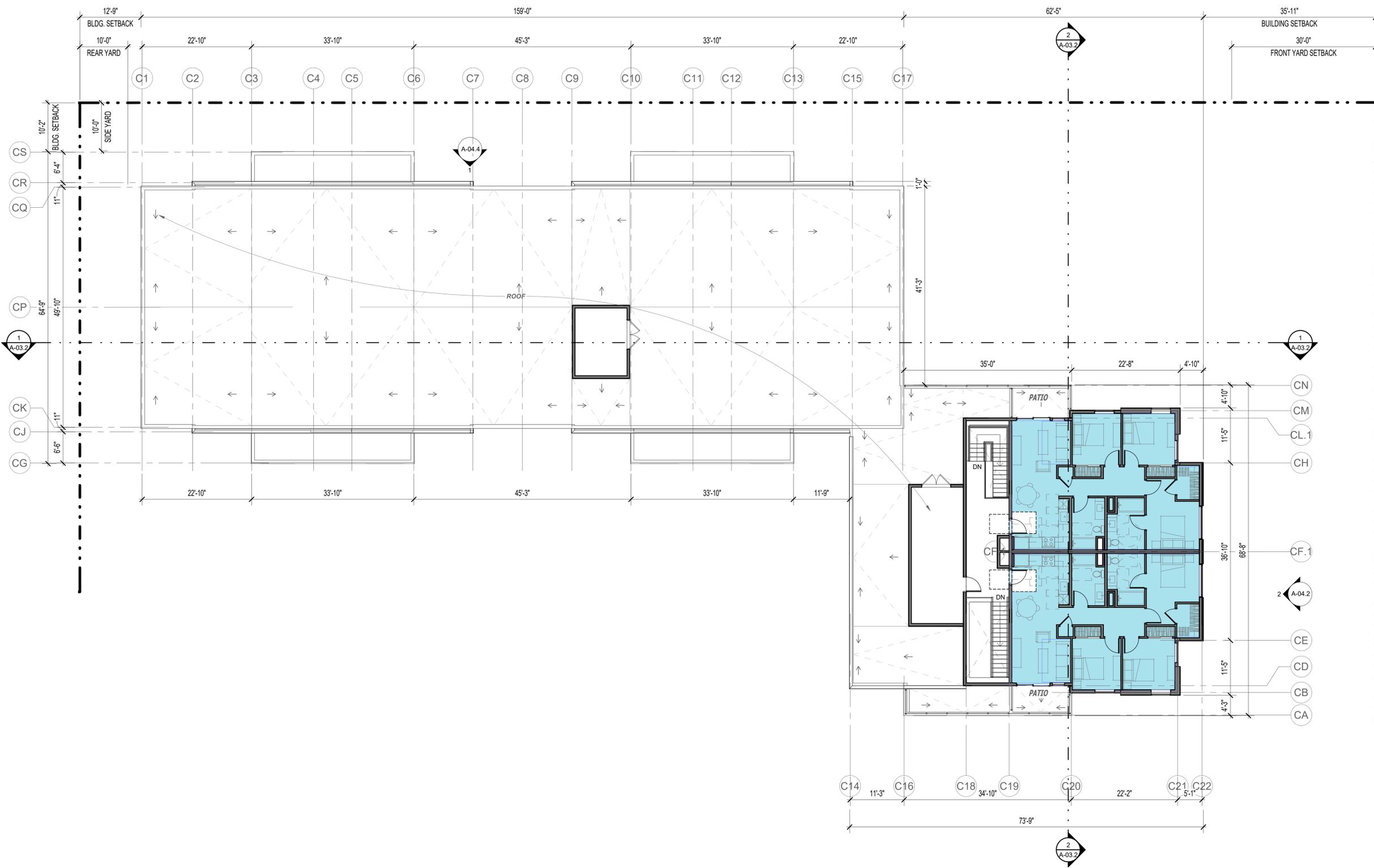


Building C Plan - Level 2

UNIT TOTALS - BUILDING C		
BUILDING	UNIT TYPE	QUANTITY
C	1 BEDROOM UNIT	3
C	1 BEDROOM UNIT MOBILITY & COMMUNICATION	1
C	2 BEDROOM UNIT	13
C	2 BEDROOM UNIT COMMUNICATION	1
C	2 BEDROOM UNIT MOBILITY	2
C	3 BEDROOM UNIT	5
C	3 BEDROOM UNIT MOBILITY	1
		26

HATCH LEGEND	
	COMMON BUILDING
	1 BEDROOM UNIT (638SF)
	2 BEDROOM UNIT (891SF)
	3 BEDROOM UNIT (1,005SF)





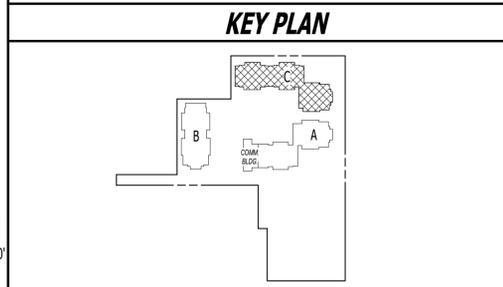
Building C Plan - Level 3

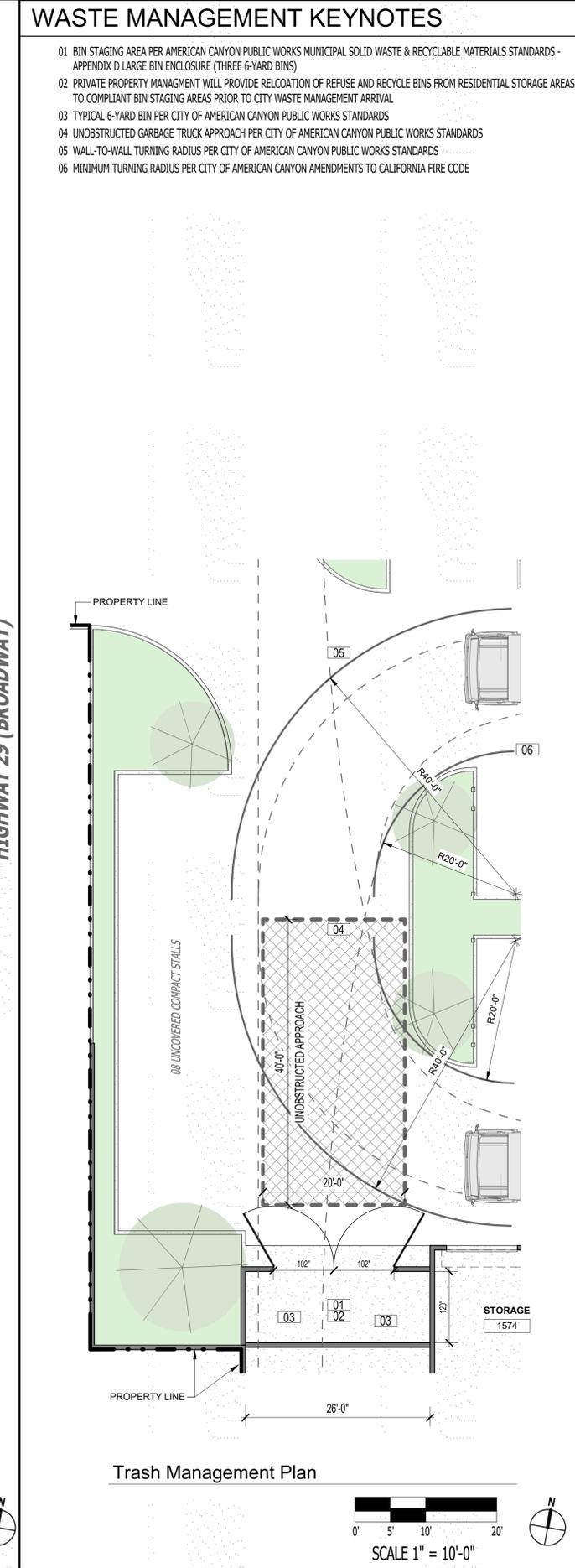
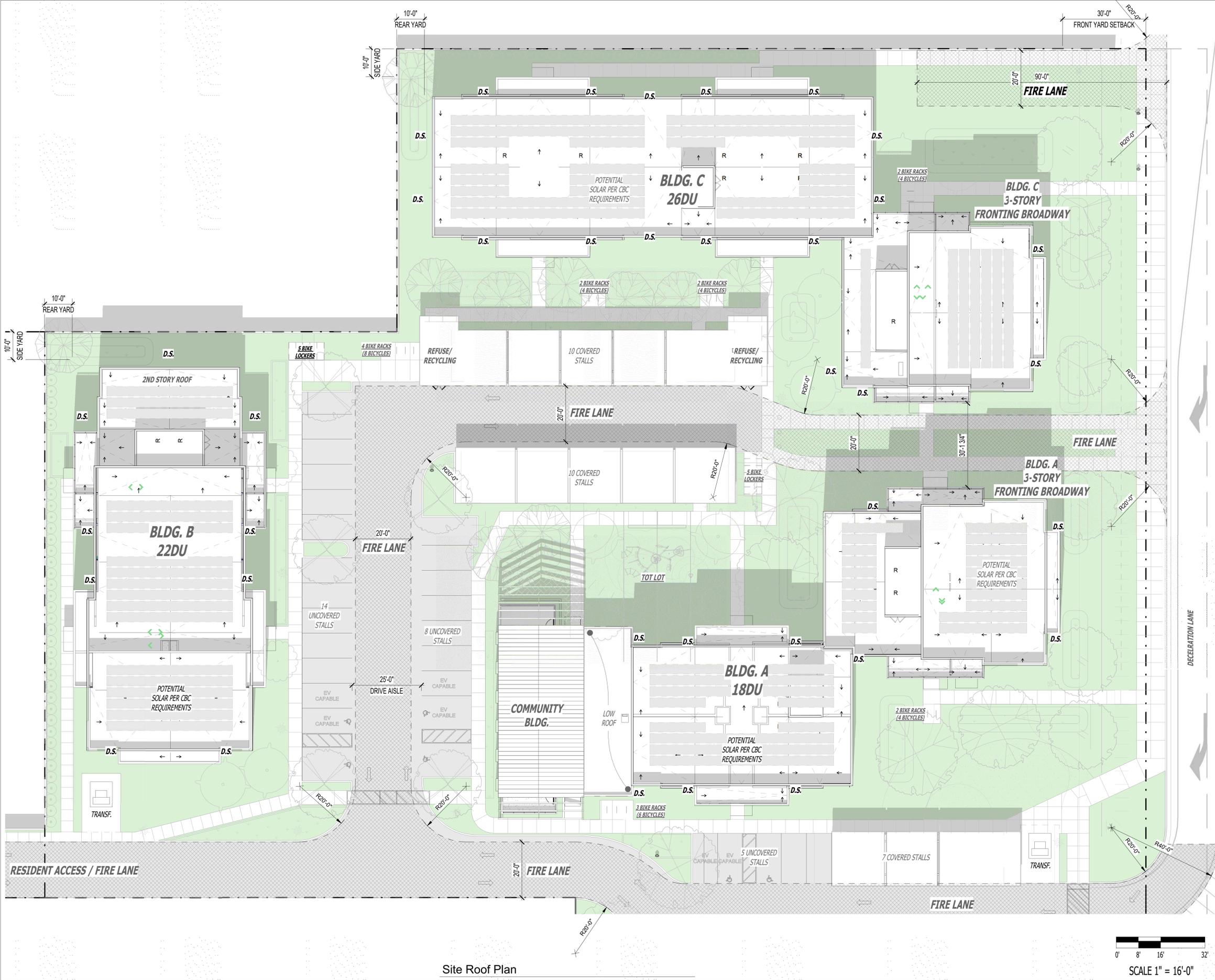
UNIT TOTALS - BUILDING C

BUILDING	UNIT TYPE	QUANTITY
C	1 BEDROOM UNIT	3
C	1 BEDROOM UNIT MOBILITY & COMMUNICATION	1
C	2 BEDROOM UNIT	13
C	2 BEDROOM UNIT COMMUNICATION	1
C	2 BEDROOM UNIT MOBILITY	2
C	3 BEDROOM UNIT	5
C	3 BEDROOM UNIT MOBILITY	1
		26

HATCH LEGEND

	COMMON BUILDING		1 BEDROOM UNIT (638SF)
			2 BEDROOM UNIT (891SF)
			3 BEDROOM UNIT (1,005SF)





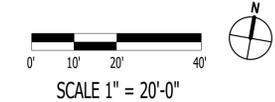
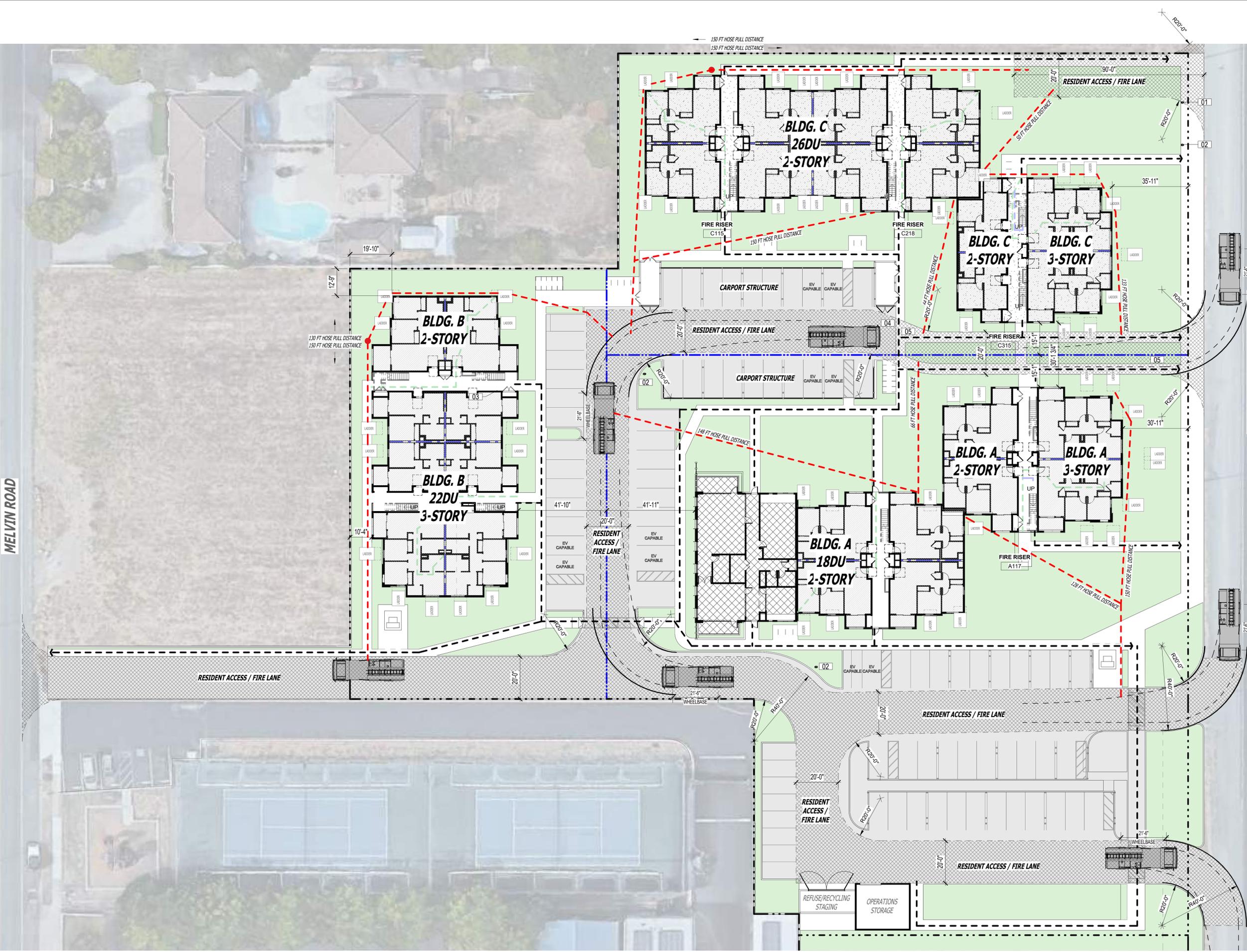
FIRE ACCESS GENERAL NOTES

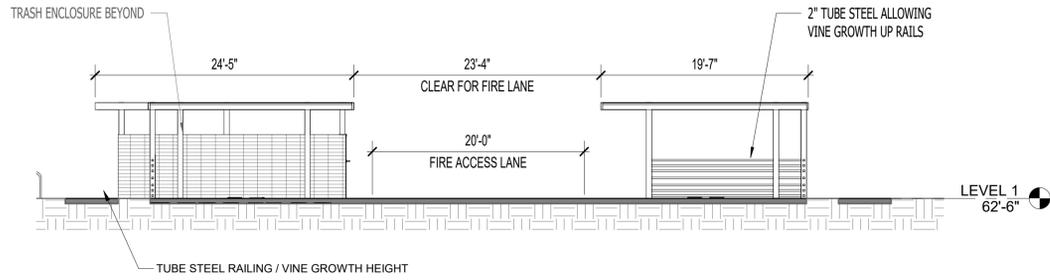
1. IN ACCORDANCE WITH THE STANDARD MITIGATION MEASURES AND CONDITIONS OF APPROVAL SET FORTH BY THE CITY OF AMERICAN CANYON, THE DEVELOPER SHALL PAY THE FIRE IMPACT FEES, PRIOR TO ISSUANCE OF ANY BUILDING PERMITS.
2. BUILDINGS IN EXCESS OF TWO STORIES SHALL PAY AERIAL APPARATUS MITIGATION FEES PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS.
3. 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.
4. 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.
5. 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 & C OF THE CALIFORNIA FIRE CODE.
6. FIRE PROJECTION 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.
7. 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.
8. 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.
9. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED MINIMUM WIDTH OF 20 FT (CURB-TO-CURB) AND AN MINIMUM UNOBSTRUCTED VERTICAL CLEARANCE OF 13'-6". THEY SHALL HAVE AN ALL-WEATHER PAVED SURFACE CAPABLE OF SUPPORTING A GROSS VEHICLE WEIGHT OF 71,000 POUNDS.
10. 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 BUILDINGS FROM AN APPROVED EXTERIOR ROUTE. IF THIS CANNOT BE ACHIEVED FIRE APPARATUS TURN AROUND WILL BE NEEDED.
11. FIRE APPARATUS ACCESS ROADS SHALL NOT BE OBSTRUCTED IN ANY MANNER, INCLUDING THE PARKING OF VEHICLES. VERTICAL TRAFFIC CALMING IN THE FORM OF SPEED BUMPS, HUMPS OR DIPS ARE PROHIBITED ALONG FIRE ACCESS ROADS WITHOUT PRIOR APPROVAL OF THE FIRE CODE OFFICIAL. THE MINIMUM WIDTH AND CLEARANCES ARE ESTABLISHED IN SECTION 503.2.1 SHALL BE MAINTAINED AT ALL TIMES.
12. 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 CALIFORNIA VEHICLE CODE AND APPROVED CITY STANDARDS.
13. 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 PUBLICS WORKS STANDARD FP-2A & FP-2B WITH PLAN SUBMITTALS FOR PERMITTING.
14. 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.
15. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE LOCATED NOT MORE THAN 100 FEET FROM THE NEAREST FIRE HYDRANT.

- ## FIRE ACCESS PLAN KEYNOTES
- 01 (E) FIRE HYDRANT TO BE RELOCATED SOUTH PER CIVIL DWGS.
 - 02 NEW FIRE HYDRANT PROPOSED
 - 03 PROPOSED STANDPIPE; PROTECTED W/IN 1HR RATED SHAFT
 - 04 PROPOSED ROLL-CURB AT DRIVEWAY AND SIDEWALK INTERSECTION
 - 05 NEW BOLLARDS AT FIRE LANE ENTRANCE/EXIT; SEE LANDSCAPE DWGS FOR DETAILS

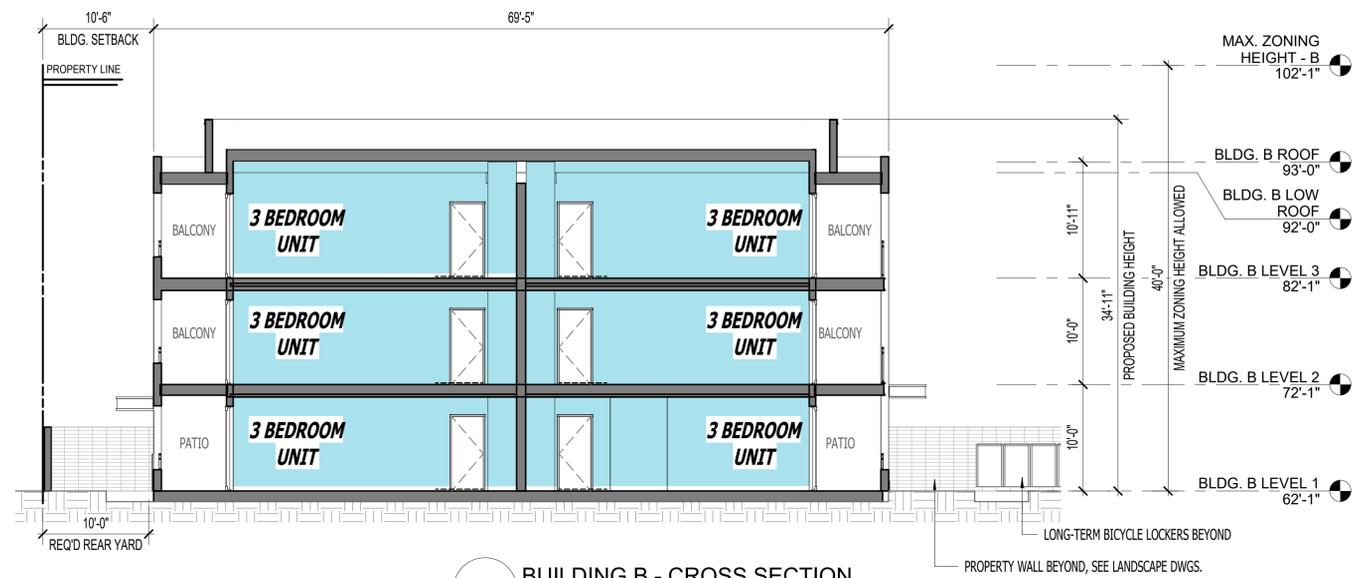
- ## FIRE ACCESS LEGEND
- ASSUMED PROPERTY LINE (BETWEEN BUILDINGS)
REGULATING FIRE OPENING PROTECTIVES
 - FIRE ACCESS HOSE PULL (LIMIT 150FT)
 - ASSUMED PATH OF TRAVEL

- ## FIRE APP. TURNING TEMPLATE
-

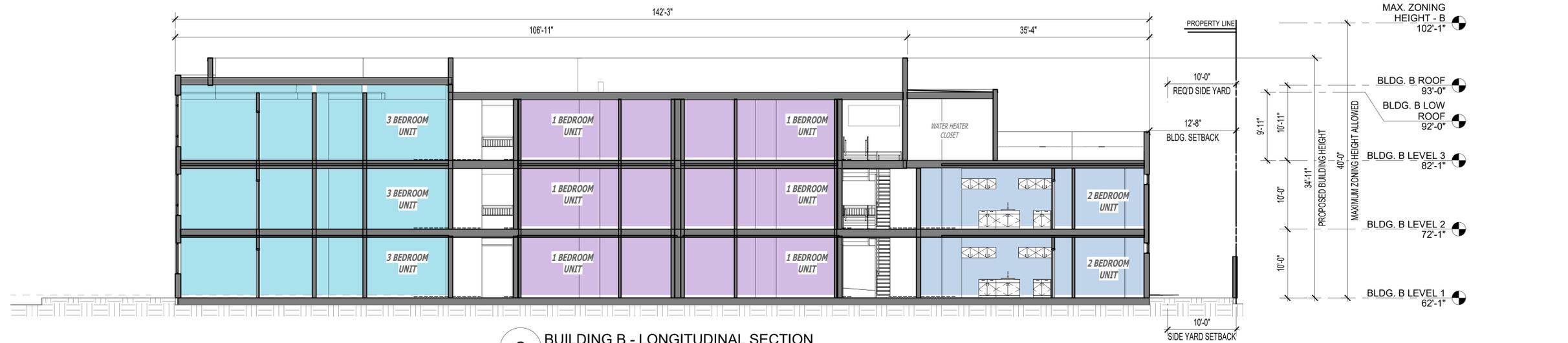




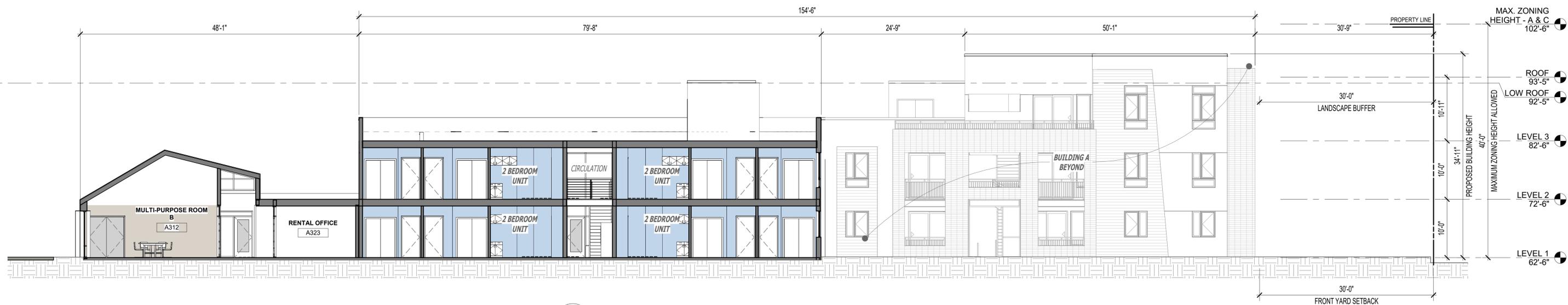
4 CARPORT SECTION
1/8" = 1'-0"



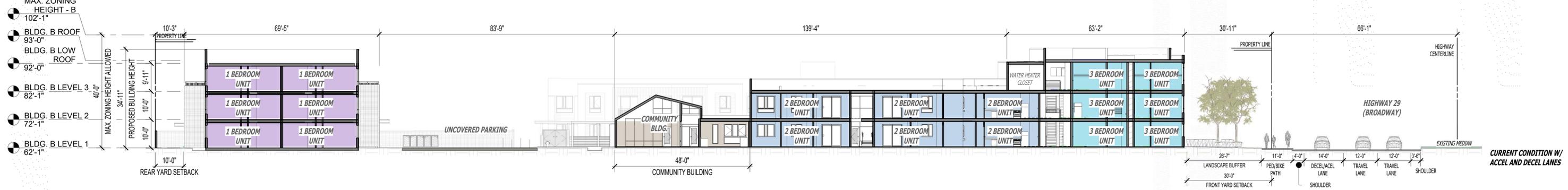
3 BUILDING B - CROSS SECTION
1/8" = 1'-0"



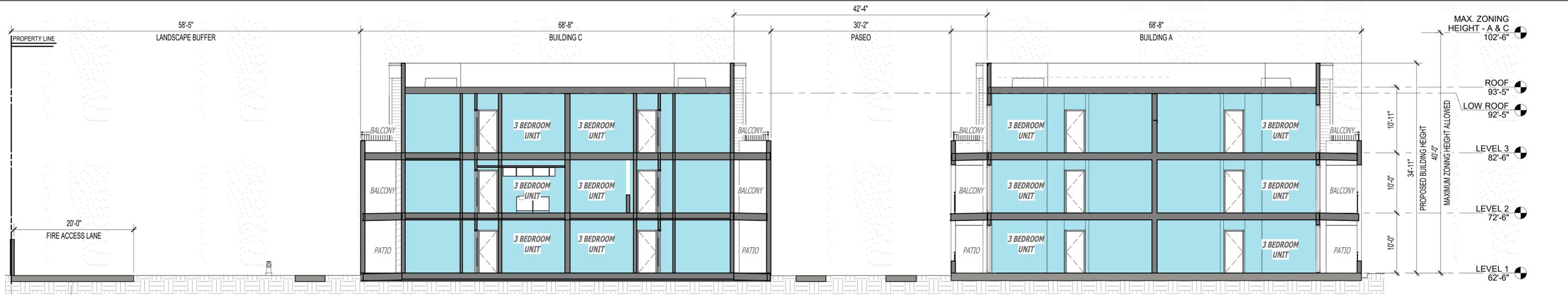
2 BUILDING B - LONGITUDINAL SECTION
1/8" = 1'-0"



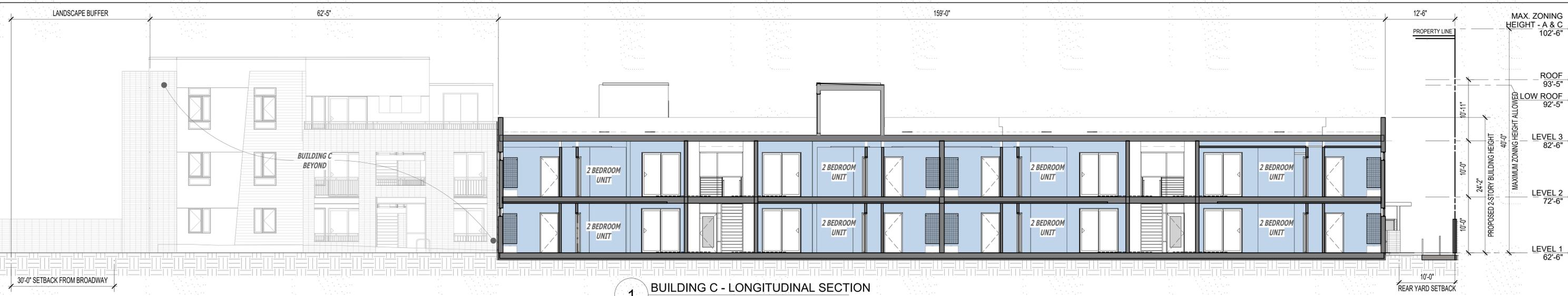
1 BUILDING A - LONGITUDINAL SECTION
1/8" = 1'-0"



3 SITE SECTION - DECEL/ACEL LANES
1/16" = 1'-0"



2 BUILDINGS A & C - SECTION
1/8" = 1'-0"



1 BUILDING C - LONGITUDINAL SECTION
1/8" = 1'-0"



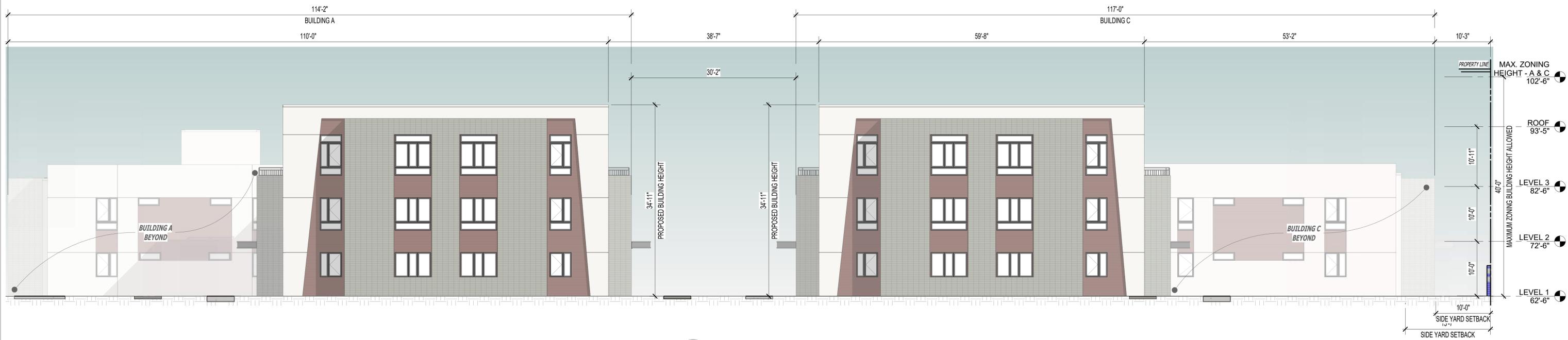
2 BUILDING A - NORTH
1/8" = 1'-0"



1 BUILDING A - SOUTH
1/8" = 1'-0"

MATERIAL PALETTE

<p>BRICK VENEER COLOR: GREY SIZE: 4" x 16" BOND: STACKED BOND</p>	<p>FIBER CEMENT SIDING COLOR: HARDIE "BRUSHWORK RED" OR SIMILAR SIZE: 6" SHIPLAP SIDING</p>	<p>STUCCO/PLASTER COLOR: WARM GREY R:165 G:157 B:146 (OR SIMILAR) TEXTURE: MEDIUM SAND FINISH</p>
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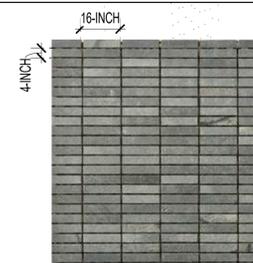


2 BUILDINGS A & C - EAST
1/8" = 1'-0"

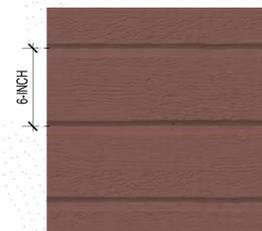


1 BUILDING A - WEST
1/8" = 1'-0"

MATERIAL PALETTE



BRICK VENEER
COLOR: GREY
SIZE: 4" x 16"
BOND: STACKED BOND



FIBER CEMENT SIDING
COLOR: HARDIE "BRUSHWORK RED" OR SIMILAR
SIZE: 6" SHIPLAP SIDING



STUCCO/PLASTER
COLOR: WARM GREY
R:165 G:157 B:146 (OR SIMILAR)
TEXTURE: MEDIUM SAND FINISH



2 BUILDING B - WEST
1/8" = 1'-0"



1 BUILDING B - EAST
1/8" = 1'-0"

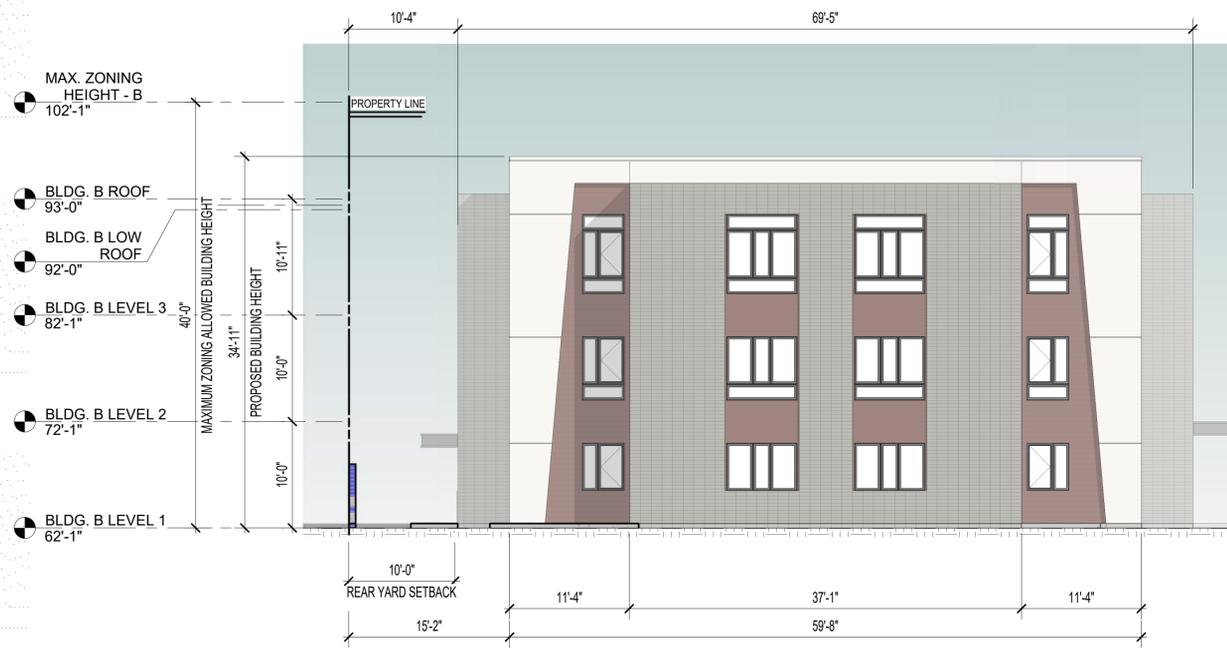
(WEST FACADE SIMILAR)

MATERIAL PALETTE

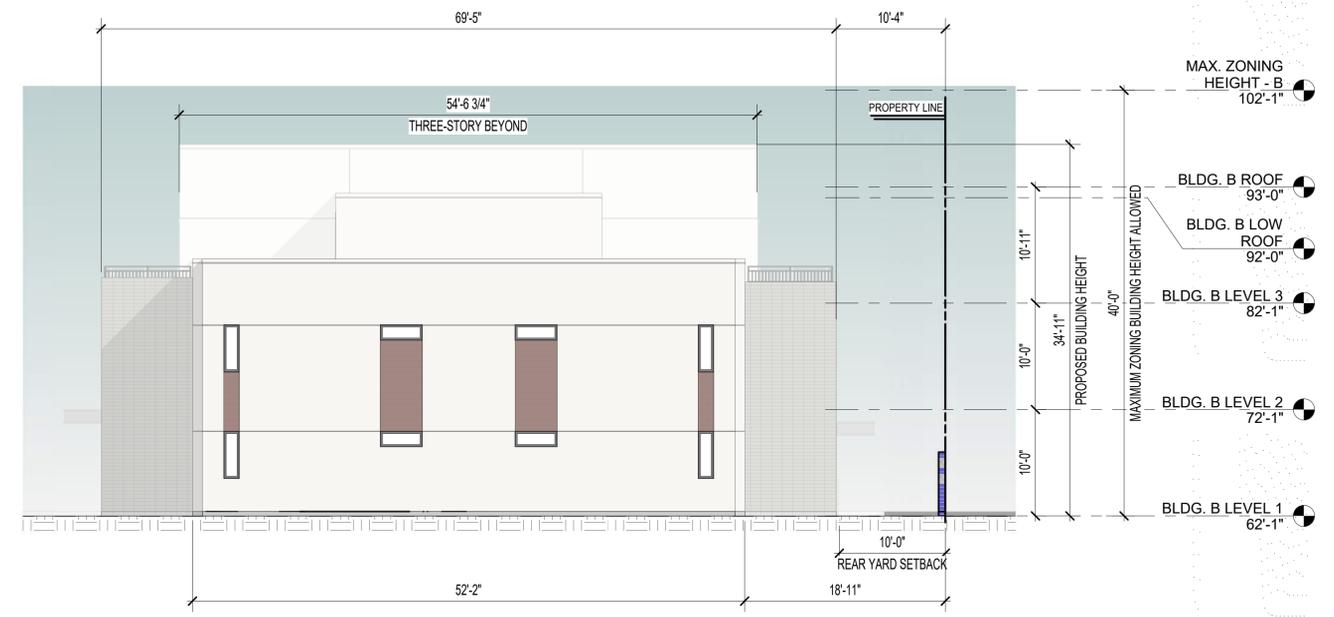
<p>BRICK VENEER COLOR: GREY SIZE: 4" x 16" BOND: STACKED BOND</p>	<p>FIBER CEMENT SIDING COLOR: HARDIE "BRUSHWORK RED" OR SIMILAR SIZE: 6" SHIPLAP SIDING</p>	<p>STUCCO/PLASTER COLOR: WARM GREY R:165 G:157 B:146 (OR SIMILAR) TEXTURE: MEDIUM SAND FINISH</p>
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SCALE 1" = 8'-0"



3 BUILDING B - SOUTH
1/8" = 1'-0"



2 BUILDING B - NORTH
1/8" = 1'-0"



1 BUILDING C - NORTH
1/8" = 1'-0"

CURRENT CONDITION W/
ACCEL AND DECEL LANES

MATERIAL PALETTE





1 BUILDING C - SOUTH
1/8" = 1'-0"

CURRENT CONDITION W/
ACCEL AND DECEL LANES

MATERIAL PALETTE

 <p>BRICK VENEER COLOR: GREY SIZE: 4" x 16" BOND: STACKED BOND</p>	 <p>FIBER CEMENT SIDING COLOR: HARDIE "BRUSHWORK RED" OR SIMILAR SIZE: 6" SHIPLAP SIDING</p>	 <p>STUCCO/PLASTER COLOR: WARM GREY R:165 G:157 B:146 (OR SIMILAR) TEXTURE: MEDIUM SAND FINISH</p>
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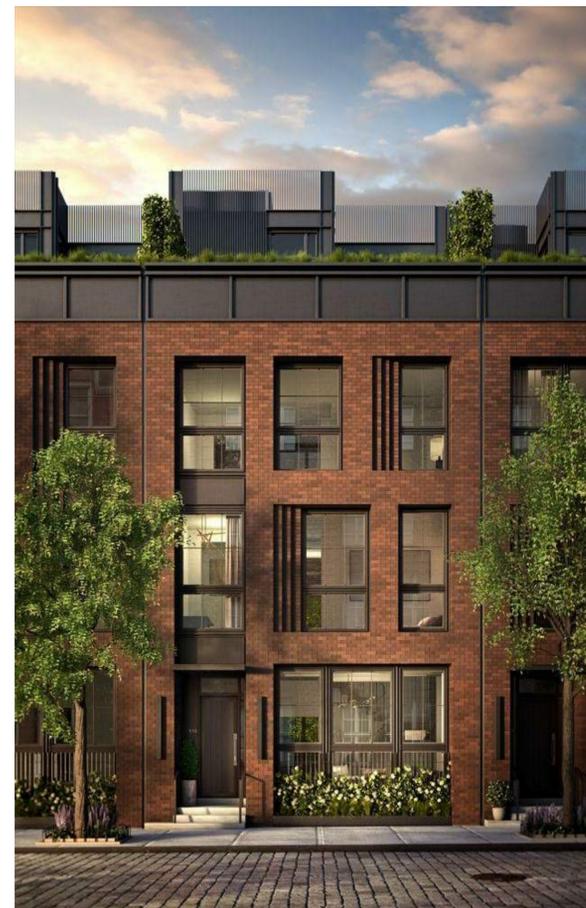


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**MULTI-FAMILY
 MODERN INDUSTRIAL**

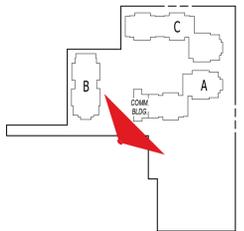
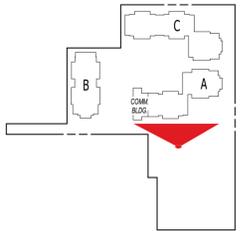


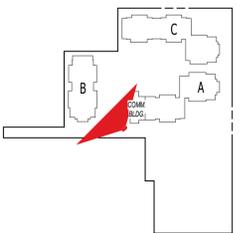
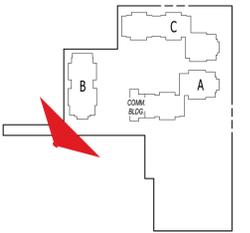
**BROWNSTONE / TOWNHOME
 MODERN INDUSTRIAL**



***NAPA VALLEY
MODERN INDUSTRIAL***

***MATERIAL PALLETTE
MODERN INDUSTRIAL MATERIALS***





Tree Palette

SYMBOL	BOTANICAL NAME	COMMON NAME	NATIVE / ADAPTIVE	MATURE SIZE (HxW)	CONTAINER SIZE	WUCOLS
CANOPY TREES						
	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	A	40'-60' x 25'35'	15 GAL	MOD.
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	A	25'-35' x 25'-35'	15 GAL	LOW
	ZELKOVA SERRATA 'VILLAGE GREEN'	VILLAGE GREEN JAPANESE ZELKOVA	A	40'-50' x 30'-40'	15 GAL	MOD.
	PLATANUS ACERIFOLIA 'COLUMBIA'	COLUMBIA LONDON PLANE TREE	A	40'-80' x 30'-50'	15 GAL	MOD.
	ULMUS PARVIFOLIA 'DRAKE'	DRAKE CHINESE ELM	A	40'-60' x 50'-70'	15 GAL	MOD.
ACCENT TREES						
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	A	20'-40' x 20'-30'	24" BOX	LOW
	ZELKOVA SERRATA 'CITY SPRITE'	CITY SPRITE JAPANESE ZELKOVA	A	20'-35' x 15'-18'	24" BOX	MOD.
	PRUNUS CERASIFERA 'KRAUTER VESUVIUS'	KRAUTER VESUVIUS CHERRY PLUM	A	18'-25' x 12'-15'	24" BOX	MOD.
	PRUNUS CAROLINIANA 'COMPACTA'	COMPACT CAROLINA CHERRY	A	6'-10' x 4'-6'	24" BOX	LOW
	LAGERSTROEMIA SPP.	CRAPE MYRTLE	A	20'-25' x 10'-15'	24" BOX	LOW
	CHILOPSIS LINEARIS	DESERT WILLOW	N	15'-30' x 10'-20'	24" BOX	V. LOW
	CERCIS RENIFORMIS 'OKLAHOMA'	OKLAHOMA REDBUD	A	25' x 35'	24" BOX	LOW
SCREENING TREES						
	PODOCARPUS M. 'MAKI'	MAKI SHRUBBY YEW PODOCARPUS	A	8'-12' x 2'-4'	15 GAL	MOD.
	QUERCUS SUBER	CORK OAK	A	30'-60' x 30'-60'	24" BOX	LOW
	QUERCUS LOBATA	VALLEY OAK	N	50'-80' x 50'-80'	24" BOX	LOW

SHRUB AREA
SEE PROPOSED PLANT PALETTE, SHEET L-5

BIORETENTION AREA
SEE PROPOSED PLANT PALETTE, SHEET L-5

TURF
SEE PROPOSED PLANT PALETTE, SHEET L-5

Fence Legend

-  6' HIGH WOOD GOOD NEIGHBOR PERIMETER FENCE
-  EXISTING CHAIN LINK FENCE TO REMAIN
-  3-RAIL CONCRETE FENCE

Lighting Legend

-  PARKING LOT LIGHT POLE PER SITE LIGHTING PLAN
-  PEDESTRIAN SCALE LIGHT POLE PER SITE LIGHTING PLAN

Callout Legend

- ① PARKING LOT WITH CANOPY SHADE TREES AND COVERED PARKING STALLS
- ② PERIMETER PLANTING WITH SCREEN TREES
- ③ PLAYGROUND:
 - CHILDREN'S PLAY STRUCTURE
 - SITE FURNISHINGS, SUCH AS BENCHES & SEAT WALL
 - SHADE TREES
 - DROUGHT TOLERANT PLANTING
- ④ COMMUNITY BUILDING OUTDOOR SEATING AREA:
 - SITE FURNISHINGS, SUCH AS CAROUSEL TABLES (STANDARD AND ADA) AND TRASH RECEPTACLES
 - DECORATIVE PAVING
- ⑤ BIO-RETENTION AREAS:
 - PLANTING CONSISTING OF ORNAMENTAL GRASSES AND SHRUBS
- ⑥ MULTI-PURPOSE TURF AREA
- ⑦ BICYCLE PARKING
- ⑧ REFUSE/RECYCLING ENCLOSURE
- ⑨ OPERATIONS STORAGE
- ⑩ EMERGENCY VEHICLE ACCESS (EVA):
 - LOW GROUNDCOVER
 - REMOVABLE BOLLARDS
- ⑪ LADDER PADS PER ARCHITECTURE PLANS

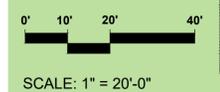


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SAN DIEGO, CALIFORNIA 92117
(646)518-7280

NAPA COVE APARTMENTS
American Canyon, California

LANDSCAPE PLAN
CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 5, 2021

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558
tel: 707.224.2299
www.vandertoolen.com



L-1
Project No. 05721

Tree Palette

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SHRUB AREA
SEE PROPOSED PLANT PALETTE, SHEET L-5

BIORETENTION AREA
SEE PROPOSED PLANT PALETTE, SHEET L-5

TURF
SEE PROPOSED PLANT PALETTE, SHEET L-5

Fence Legend

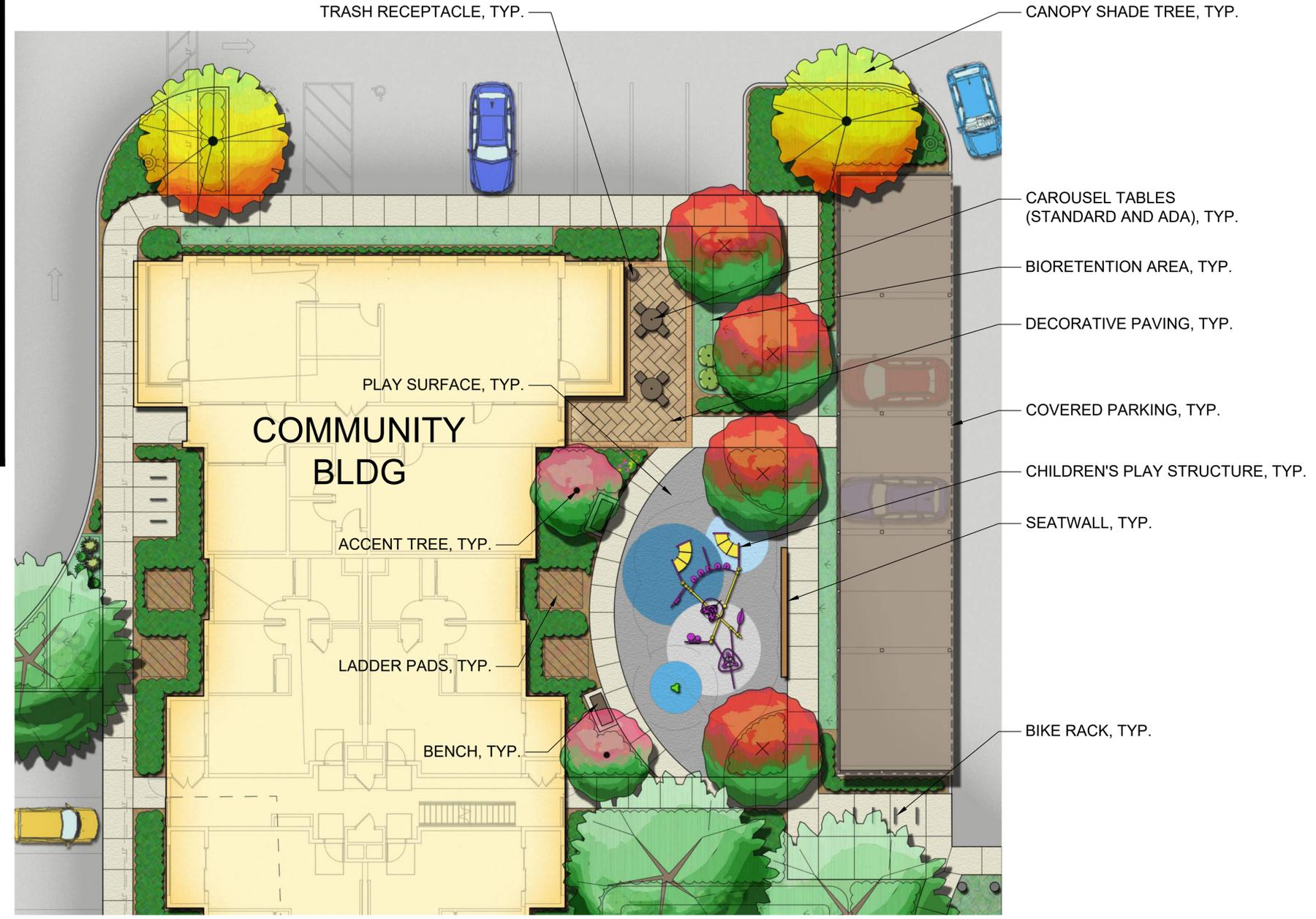
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 - SITE FURNISHINGS, SUCH AS BENCHES & SEAT WALL
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 - DROUGHT TOLERANT PLANTING
- 4 COMMUNITY BUILDING OUTDOOR SEATING AREA:
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- 5 BIO-RETENTION AREAS:
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- 7 BICYCLE PARKING
- 8 REFUSE/RECYCLING ENCLOSURE
- 9 OPERATIONS STORAGE
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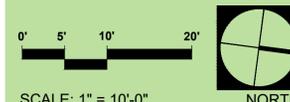
NAPA COVE APARTMENTS
American Canyon, California

ENLARGEMENT PLAN
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0' 5' 10' 20'
SCALE: 1" = 10'-0"
NORTH



L-2
Project No. 05721

IRRIGATION CONCEPT STATEMENT

THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE OF CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (TITLE 23 - DIVISION 2-CHAPTER 2.7) AND THE CITY OF AMERICAN CANYON WATER EFFICIENT LANDSCAPE STANDARDS.

THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.

THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS, AND LOW FLOW IRRIGATION FOR TURF PLANTINGS.

PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPOTRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.

SITE AREA TABLE

AREA TYPE	SQUARE FOOTAGE	PERCENT OF LANDSCAPE
BUILDINGS & IMPERVIOUS SURFACES (WALKWAYS & PARKING LOT/DRIVE)	111,923 SF	72%
TREES, SHRUBS & GROUNDCOVERS	34,855 SF	22%
TURF	1,197 SF	1%
BIO TREATMENT	7,865 SF	5%
TOTAL SITE AREA	155,840 SF	100%

HYDROZONE LEGEND

- TREES, SHRUBS & GROUNDCOVERS - SOUTH/ WEST
- TREES, SHRUBS & GROUNDCOVERS - NORTH/ EAST
- BIORETENTION
- TURF

MWELO STATEMENT OF COMPLIANCE

"I HAVE COMPLIED WITH THE CRITERIA OF THE CITY OF AMERICAN CANYON WATER EFFICIENT LANDSCAPING ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLAN."

PHILIP A. VANDERTOOLEN, PRESIDENT
VANDERTOOLEN ASSOCIATES, INC.
CA LICENSE # 2798

IRRIGATION NOTES

1. IRRIGATION ZONES: ALL LANDSCAPED AREAS HAVE AN IRRIGATION ZONE DESIGNATION OF "SHRUBS / GROUNDCOVERS / TREES" OR "TURF." NO IRRIGATION ZONES FOR ANNUALS AND TURFED SLOPES EXCEEDING 10% ARE PROPOSED.

2. DEPTH OF IRRIGATION LINES: ALL ON-GRADE LATERAL LINES SHALL BE BURIED TO A DEPTH OF 12" MIN. ALL ON-GRADE MAINLINES SHALL BE BURIED TO A DEPTH OF 18" MIN.

3. BACKFLOW PREVENTER: BACKFLOW PREVENTER SHALL BE A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (FEBCO 825Y OR EQUAL) TYPE AS APPROVED BY WATER PURVEYOR.

4. IRRIGATION SPRINKLER TYPES: ALL SPRINKLERS SHALL UTILIZE MATCHED PRECIPITATION, PRESSURE COMPENSATING NOZZLES FOR MAXIMUM UNIFORMITY OF DISTRIBUTION. IRRIGATION SYSTEMS TO BE INSPECTED PERIODICALLY FOR BROKEN OR DEFICIENT EQUIPMENT.

5. IRRIGATION CONTROLLERS: CONTROLLER SHALL BE AN AUTOMATIC ET (EVAPOTRANSPIRATION) WITH MULTIPLE PROGRAMMING CAPABILITY. CONTROLLER TO BE REPROGRAMMED SEASONALLY TO MINIMIZE RUNOFF OR OVER WATERING. WEATHER SENSING DEVICES SHALL BE UTILIZED TO CONTROL IRRIGATION CYCLES ACCORDING TO SPECIFIC IRRIGATION REQUIREMENTS.

6. CLASS OF IRRIGATION PIPE: ALL MAINLINE SHALL BE SCHEDULE 40 PVC. ALL LATERAL LINE SHALL BE CLASS 200 PVC.

7. IRRIGATION EMITTERS: ALL TURF AREAS SHALL BE IRRIGATED USING LOW FLOW OVERHEAD ROTARY SPRAY. ALL SHRUB/ GROUNDCOVER AREAS SHALL BE IRRIGATED USING DRIP IRRIGATION SYSTEM. ALL TREE AREAS SHALL BE IRRIGATED USING BUBBLER IRRIGATION SYSTEM.

Water Efficient Landscape Worksheet

Adapted from California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance

Use drop down menus or type in values in white cells only. Results appear in yellow or red highlighted cells below.

Site Information								
Site Name	Napa Cove Apartments							
Site Type	Residential	Allowed ETAF	0.55					
Annual Eto (inches/yr)	45.8							
Hydrozone or Planting Description (a)	Plant Factor (PF)	Irrigation Method (b)	Irrigation Efficiency (IE) (c)	ETAF (PF/IE)	Landscape Area (sqft.)	ETAF x Area	*Estimated Total Water Use (gal./yr.)	
Regular Landscape Areas								
TREES (LOW/MOD)	0.8	Low	RWS-Bubbler	0.81	0.4	749	277	8,877
SHRUBS (LOW/MOD)	0.8	Low	Drip	0.81	0.8	44,815	12,909	365,373
TURF (MOD)	0.6	Mod./Ave.	Overhead Spray	0.75	0.8	1,197	958	27,192
BIO-FILTRATION (MOD)	0.4	Mod./Ave.	Overhead Spray	0.75	0.5	7,865	4,195	119,112
					SUBTOTAL	44,666	18,339	520,752
Special Landscape Areas								
1					0	0	0	0
2					1	0	0	0
3					1	0	0	0
					SUBTOTAL	0	0	0
						*Estimated Total Water Use (ETWU)	520,752	
						Maximum Allowed Water Allowance (MAWA)	697,585	

(a) Hydrozone #/Planting Description
1.) Front Lawns
2.) low water use planting
3.) medium water use

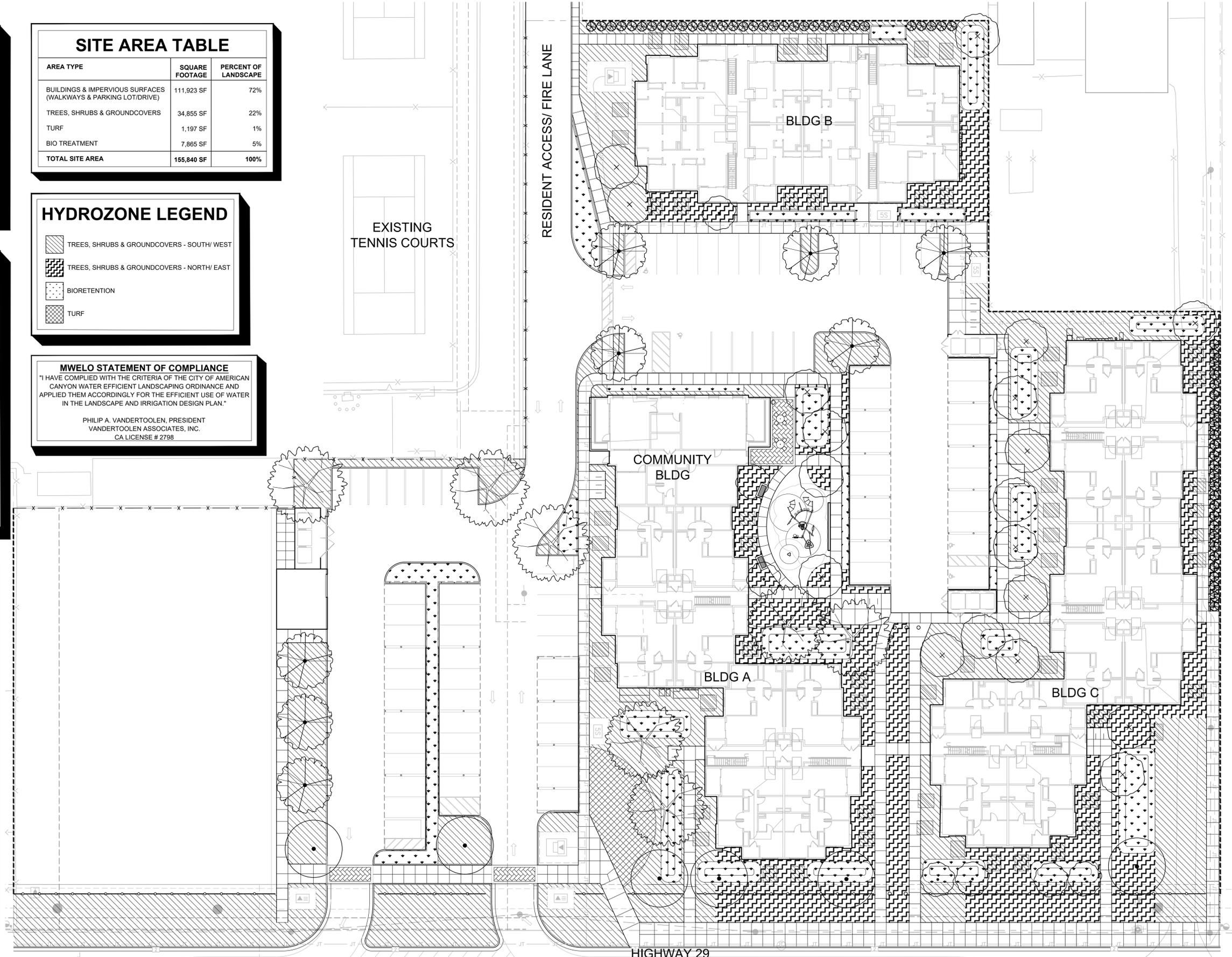
(b) Irrigation Method
Overhead Spray
Drip
Bubbler

(c) Irrigation Efficiency
0.75 for spray head
0.81 for drip

(*) ETWU (Annual Gallons Required) = Eto x 0.62 x ETAF x Area where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year. EA is the total landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations		
Regular Landscape Areas	Total ETAF x Area	18,339
	Total Area	44,666
	Average ETAF	0.41
All Landscape Areas	Total ETAF x Area	18,339
	Total Area	44,666
	Site-wide ETAF	0.41

Notes:
Average ETAF (ET adjustment factor) for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.
Calculator developed to meet code effective Dec. 1, 2015. This calculator is for estimating purposes only.

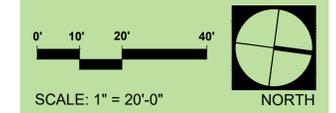


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L-3
Project No. 05721



A 3-RAIL FENCE



B WOOD GOOD NEIGHBOR FENCE



C 20" HIGH SEAT WALL



D BIKE RACK



E METAL BENCH



F CAROUSEL TABLE



G TRASH RECEPTACLE



H PLAY STRUCTURE AND RUBBER SURFACE



I DECORATIVE PAVING

TREES



ACER R. 'OCTOBER GLORY'



PISTACIA CHINENSIS



PLATANUS A. 'COLUMBIA'



ULMUS PARVIFOLIA 'DYNASTY'



QUERCUS SUBER



CERCIS R. 'OKLAHOMA'



ARBUTUS 'MARINA'



PRUNUS C. 'KRAUTER VESUVIUS'



ZELKOVA 'CITY SPRITE'



LAGERSTROEMIA INDICA

SHRUBS



ABELIA GRANDIFLORA SP.



CEANOTHUS SPP.



CISTUS SPP.



DIETES SPP.



CORDYLINAE SPP.



PITTIOSPORUM SPP.



PRUNUS C. 'COMPACTA'



RHAMNUS CALIFORNICA



PENSTEMON SPP.



ZAUSCHNERIA CALIFORNICA

GRASSES



CAREX DIVULSA



YUCCA FILAMENTOSA



LOMANDRA L. BREEZE



MUHLENBERGIA CAPILLARIS



HELICTOTRICHON SEMPERVIRENS

GROUND COVER



FRAGARIA CHILOENSIS



HELIANTHEMUM NUMMULARIUM



MYOPORUM 'PUTAH CREEK'



SCAEVOLA 'MAIVE CLUSTERS'



WESTRINGIA F. 'MUNDI'

Proposed Tree Palette

BOTANICAL NAME	COMMON NAME	NATIVE / ADAPTIVE	MATURE SIZE (HxW)	CONTAINER SIZE	WATER USE
CANOPY TREES					
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Proposed Plant Palette

BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	WATER USE	NATIVE / ADAPTIVE
SHRUBS				
ABELIA SPP.	ABELIA	5 GAL	MOD	A
ACHILLEA SPP.	YARROW	1 GAL	LOW	A
AGAPANTHUS SPP.	LILY OF THE NILE	1 GAL	MOD	A
AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	LOW	N
ARCTOSTAPHYLOS SPP.	MANZANITA	5 GAL	LOW	N
BULBINE FRUTESCENS	STALKED BULBINE	1 GAL	LOW	A
CALLISTEMON VIMINALIS 'LITTLE JOHN'	DWARF WEEPING BOTTLEBRUSH	1 GAL	LOW	A
CEANOTHUS SPP.	CALIFORNIA LILAC	1 GAL	LOW	N
CISTUS SPP.	ROCKROSE	1 GAL	LOW	A
CORDYLINAE SPP.	CORDYLINAE	5 GAL	LOW	A
DODONAEA VISCOSEA 'PURPUREA'	PURPLE LEAFED HOPSEED BUSH	5 GAL	LOW	N
ESCALLONIA SPP.	ESCALLONIA	1 GAL	MOD	A
EUONYMUS SPP.	WINTERCREEPER	5 GAL	MOD	A
GREVILLEA SPP.	GREVILLEA	1 GAL	LOW	A
JUNIPERUS SPP.	JUNIPER	5 GAL	LOW	A
LIGUSTRUM JAPONICUM 'TEXANUM'	WAX LEAF PRIVET	1 GAL	MOD	A
LOROPETALUM SPP.	FRINGE FLOWER	1 GAL	LOW	A
MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	1 GAL	LOW	A
NANDINA DOMESTICA	HEAVENLY BAMBOO	1 GAL	LOW	A
NEPETA X FAASSENII	CATMINT	1 GAL	LOW	A
PENSTEMON SPP.	BEARDTONGUE	1 GAL	MOD	N
PITTIOSPORUM SPP.	TAWHIHIHI	5 GAL	MOD	A
PODOCARPUS MACROPHYLLUS 'MAKI'	MAKI SHRUBBY YEW PODOCARPUS	5 GAL	MOD	A
PRUNUS CAROLINIANA 'COMPACTA'	CAROLINA CHERRY	5 GAL	LOW	A
RHAMNUS CALIFORNICA 'EVE CASE'	CALIFORNIA COFFEEBERRY	5 GAL	LOW	N
RHAPHIOLEPIS SPP.	INDIAN HAWTHORN	5 GAL	LOW	A
SALVIA SPP.	SAGE	1 GAL	LOW	A
VERBENA SPP.	VERBENA	1 GAL	LOW	A
VIBURNUM SPP.	VIBURNUM	5 GAL	MOD	A
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	LOW	A
ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	1 GAL	LOW	N
GRASSES				
BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLUE GRAMA	1 GAL	LOW	N
CALAMAGROSTIS SPP.	REED GRASS	1 GAL	MOD	N
CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	N
CHONDROPETALUM TECTORUM	CAPE RUSH	1 GAL	LOW	A
DIETES SPP.	AFRICAN IRIS	1 GAL	LOW	A
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	LOW	A
HESPERALOE PARVIFLORA	RED YUCCA	1 GAL	LOW	A
JUNCUS PATENS 'ELK BLUE'	SPREADING RUSH	1 GAL	LOW	N
LOMANDRA LONGIFOLIA	DWARF MAT RUSH	1 GAL	LOW	A
MUHLENBERGIA SPP.	MUHLI GRASS	1 GAL	LOW	N
YUCCA FILAMENTOSA	ADAM'S NEEDLE	5 GAL	LOW	A
GROUNDCOVERS				
FRAGARIA CHILOENSIS	BEACH STRAWBERRY	1 GAL	MOD	N
HELIANTHEMUM NUMMULARIUM	WISLEY PINK ROCK ROSE	1 GAL	LOW	A
MYOPORUM X 'PUTAH CREEK'	PUTAH CREEK MYOPORUM	1 GAL	LOW	A
SCAEVOLA 'MAIVE CLUSTERS'	FAN FLOWER	1 GAL	LOW	A
WESTRINGIA FRUTICOSA MUNDI	COAST ROSEMARY	1 GAL	LOW	A

CRP AFFORDABLE

4455 MORENA BLVD, STE 107
SAN DIEGO, CALIFORNIA 92117
(646)518-7280

NAPA COVE APARTMENTS

American Canyon, California

CONCEPTUAL PLANT IMAGERY

CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 5, 2021

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558

tel: 707.224.2299
www.vandertoolen.com



L-5

Project No. 05721

GENERAL NOTES

GENERAL

- PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE W/ NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, LOCAL CODES, ORDINANCES, AND REQUIREMENTS OF UTILITY COMPANIES FURNISHING SERVICES TO INSTALLATION.
- PROVIDE ITEMS NECESSARY TO COMPLETE ELECTRICAL SYSTEMS. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY CONDUIT, BOX, CONDUCTOR, OR SIMILAR ITEMS FOR A COMPLETE INSTALLATION.
- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND DETERMINE CONDITIONS WHICH MAY AFFECT BID. ANY ITEMS NOT FULLY UNDERSTOOD SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
- "REF" INDICATIONS DENOTE WORK COVERED ELSEWHERE (ARCHITECTURAL, STRUCTURAL, OR MECHANICAL).
- WHEREVER THE WORD "PROVIDE" IS USED, IT MEANS FURNISH AND INSTALL COMPLETE AND READY FOR USE.
- COORDINATE LOCATION OF ELECTRICAL WITH OTHER TRADES.
- REFER TO EQUIPMENT DRAWINGS FOR MECHANICAL CHARACTERISTICS (SIZE, LOCATION, ETC.) OF MECHANICAL EQUIPMENT UNLESS OTHERWISE INDICATED.
- PROVIDE CONDUCTORS AND RACEWAYS PER NATIONAL ELECTRICAL CODE.

MATERIALS AND METHODS

- PROVIDE RACEWAY AND WIRING AS NOTED, ROUTED CONCEALED WITHIN BUILDING STRUCTURE WHERE POSSIBLE (EXCEPTION INCLUDES GARAGE & BOH/UTILITY ROOMS) ANY EXPOSED WIRING IS TO BE SENT AS A RFI FOR OWNER, ARCHITECT, & ENGINEER REVIEW.
- OUTDOOR EXPOSED CONDUIT ROUTING: CONDUITS ROUTED ON ROOF OR EXPOSED TO WEATHER SHALL BE EMT OR LIQUID-TIGHT FLEX, PROVIDE WATER-TIGHT CONNECTIONS AND FITTINGS. CONDUITS ON THE ROOF TO BE A MINIMUM 1" ABOVE THE ROOF SURFACE.
- CLEARANCES: VERIFY PHYSICAL DIMENSIONS OF EQUIPMENT TO ENSURE THAT ACCESS CLEARANCES CAN BE MET.
- CONNECTIONS: PROVIDE GRS, METALLIC FLEX, OR LIQUIDTITE FLEX CONDUITS FOR CONNECTIONS TO MOTORS OR MOTORIZED EQUIPMENT.
- WIRING: PROVIDE MINIMUM #12 AWG WIRE SIZE. IF CONDUIT IS TO BE USED MINIMUM IS TO BE 1/2" FLEXIBLE CONDUIT AND FLEXIBLE CABLE IS PERMISSIBLE THROUGHOUT THE BUILDING.
- FEEDERS ARE TO MAINTAIN SUFFICIENT SPACING FOR TEMPERATURE REGULATION. AT NO POINT SHALL FEEDERS BE ROUTED SUCH THAT THEY ARE BUNDLED TIGHTLY WITHOUT SUFFICIENT SPACING FOR MORE THAN 24-INCHES CONTINUOUS.
- FEEDERS TO BE MC CABLE IF THE FEEDER PASSES THROUGH TYPE 1 CONSTRUCTION.
- WIRING: UPSIZE BRANCH CIRCUITS TO LIMIT TO 2% MAXIMUM.

- WIRING: POWER WIRING SHALL BE COPPER, #14 THIN, INSULATED FOR 600V, ALUMINUM CONDUCTORS PERMITTED FOR FEEDERS 100 AMP OR LARGER, INCREASE WIRE AND CONDUIT SIZE TO EQUAL OR EXCEED DESIGNED COPPER RATING (INCLUDING GROUND).
- DISCONNECTS: PROVIDE DISCONNECTS, FUSED AND UNFUSED, SHOWN AND REQUIRED BY CODE FOR EQUIPMENT FURNISHED UNDER ELECTRICAL AND MECHANICAL SCOPES OF WORK. REFER TO COORDINATION MATRIX.
- OUTDOOR DISCONNECTS: PROVIDE ALL NECESSARY MEMBRANE PENETRATIONS WITH WATERPROOFING PER ARCHITECTURAL SPECIFICATIONS.
- ALL DISCONNECTS TO MAINTAIN CODE MINIMUM WORKING CLEARANCE (30" WIDTH, 36" DEPTH) AND ACCESS.
- INDOOR DISCONNECTS: ALLOWED TO BE INSTALLED ABOVE A CEILING PER 404.8 EX.2, PROVIDE ACCESS PANEL MINIMUM 22" X 22" PER 110.26(A)(4).
- FUSES: PROVIDE FUSES PER EQUIPMENT MANUFACTURER UNLESS OTHERWISE INDICATED. FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.
- SUPPORT: SUPPORT LIGHT FIXTURES FROM BUILDING STRUCTURE. DO NOT SUPPORT FIXTURES FROM SUSPENDED CEILING.
- ELECTRICAL PANEL, TIME SWITCH, DISCONNECT, STARTER, CONTACTOR, PULL BOX, ETC. ENCLOSURES SHALL BE PERMANENTLY LABELED TO IDENTIFY ITS DESIGNATION OR UNIT SERVED. PANEL SCHEDULES MUST BE TYPED.
- PAINTING: ELECTRICAL ENCLOSURES SHALL BE PAINTED TO MATCH ADJACENT WALL.
- COVERPLATES: PROVIDE AS FOLLOWS, SUBMIT SAMPLE OF EACH FOR APPROVAL.
- COMMERCIAL KITCHENS: STAINLESS STEEL SWITCH PLATES, WITH BLACK DEVICES.
- ALL OTHER AREAS: WHITE COLOR PLASTIC
- ELECTRICAL CONTRACTOR SHALL REVIEW THE LANDSCAPE PLANS FOR ALL REQUIRED IRRIGATION CONTROL WIRING RACEWAY REQUIREMENTS.
- OUTLET BOXES SHALL NOT BE INSTALLED BACK TO BACK.

SITE ELECTRICAL

- TRENCHING: COORDINATE ALL TRENCHING WORK WITH OTHER UTILITY LOCATIONS AND DRAINAGE TRENCHES.
- UNDERGROUND CONDUITS: PROVIDE PVC, SCHEDULE 40, 3/4" MINIMUM, PROVIDE PVC CONDUIT TRANSITION BELOW WHEN TURNING UP TO ABOVE GRADE.
- BELOW SLAB: CONDUIT ROUTED BELOW ON-GRADE FLOOR SLABS SHALL BE INSTALLED PRIOR TO FLOOR SLAB POUR. ROUTE CONDUITS BELOW SLAB AS STRAIGHT AS POSSIBLE TO MINIMIZE BENDS.
- ALL CONDUITS PENETRATING THE BUILDING ENVELOPE BELOW GRADE SHALL FOLLOW WATERPROOFING REQUIREMENTS IN THE ARCHITECTURAL DRAWINGS.

NEUTRALS

- AT CONTRACTORS OPTION, NEUTRALS MAY BE SHARED ON COMBINED HOMERUNS UNLESS THE CIRCUIT HAS A GFCI OR AFCI BREAKER, AN ISOLATED GROUND, OR IS FROM A PANEL WITH SPD (TVSS) PROTECTION. ANY NEUTRAL DOWNSTREAM FROM A DIMMER SHALL BE DEDICATED TO THE DIMMED LOAD.

ACCESS PANELS: CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN ACCESS PANELS FOR ACCESS TO THEIR EQUIPMENT. CONTRACTOR SHALL SUBMIT A FULL PLAN SHOWING LOCATIONS TO THE GC PRIOR TO INSTALLATION.

ALL SWITCH AND RECEPTACLE DEVICES IN DWELLING UNITS & COMMON PUBLIC AREAS TO BE DECORA STYLE

WIRING: NON-METALLIC CABLE (ROMEX) IS ALLOWED IN TYPE III OR V CONSTRUCTION ONLY, INSTALLED PER NEC

ABBREVIATIONS

A	AMPERE	KW	KILOWATT LIGHTING
AC	ALTERNATING CURRENT, ABOVE COUNTER	LTG	LIGHTING
AFF	ABOVE FINISHED FLOOR	MATV	MASTER ANTENNA TELEVISION MANUFACTURER
AIC	AMPS INTERRUPTING CAPACITY	MFR	MINIMUM
AL	ALUMINUM	MLO	MAIN LUGS ONLY
AMP	AMPERE	MPOE	MAIN POINT OF ENTRY
ATS	AUTOMATIC TRANSFER SWITCH	N	NEUTRAL
AWG	AMERICAN WIRE GAUGE	NEC	NOT IN CONTRACT
BRKR	BREAKER	NATIONAL ELECTRICAL CODE (NFPA-70)	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BULDG	BUILDING	NTS	NOT TO SCALE
BOH	BACK OF HOUSE	OS	OCCUPANCY SENSOR
CONDUIT	CONDUIT	PC	PHOTOCCELL
CEC	CALIFORNIA ELECTRICAL CODE CIRCUIT	PNL	PANEL
CEILING	CEILING	POC	POINT OF CONNECTION
CEILING	CARBON MONOXIDE	PT	POTENTIAL TRANSFORMER
CEILING	CURRENT TRANSFORMER	PVC	POLYVINYL CHLORIDE
CT	COPPER	PWR	POWER
CW	COOL WHITE	QTY	QUANTITY
D/B	DESIGN/BUILD	RECEPT	RECEPTACLE
DCO	DUPLEX CONVENIENCE OUTLET	ROMEX	ELECTRICAL NM CABLE
DISP	GARBAGE DISPOSAL	SD	SMOKE DETECTOR
DN	DOWN	SER	SERVICE ENTRANCE CABLE
DW	DISHWASHER	SPEC	SPECIFICATIONS
EXIST	EXISTING	SW	SWITCH
EF	EXHAUST FAN	SWBD	SWITCHBOARD
ELEC	ELECTRICAL	SWGR	SWITCHGEAR
EMT	ELECTRICAL METALLIC TUBING	TTB	TELEPHONE TERMINAL BOARD
ENT	ELECTRICAL NON-METALLIC TUBING	TYP	TYPICAL
ERRCS	EMERGENCY RADIO RESPONDER COVERAGE SYSTEM	UG	UNDERGROUND
EQUIP	EQUIPMENT	UL	UNDERWRITERS LABORATORIES UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	UNON	UNLESS OTHERWISE NOTED
FLR	FLOOR	UTL	UTILITY
FLOUOR	FLOURESCENT	VOLTS	VOLTS
FON	FRONT OF HOUSE	VS	VACANCY SENSOR
GFC	GROUNDING ELECTRODE CONDUCTOR	W	WATTS
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WW	WARM WHITE
GRND	GROUND	WP	WEATHERPROOF
GRS	GALVANIZED RIGID STEEL	W/O	WITHOUT
HP	HIGH INTENSITY DISCHARGE	XFMR	TRANSFORMER
HPWH	HORSEPOWER	XFR	TRANSFER
HT	HEAT PUMP WATER HEATERS		IMPEDANCE OR ZONE
HT	HEAT TRACE		
IC	INSULATED CEILING RATED		
IDF	INTERMEDIATE DISTRIBUTION FRAME		
IG	ISOLATED GROUND		
JT	JOINT TRENCH		
KMIL	THOUSAND CIRCULAR MILLS		
KITCH	KITCHEN EQUIPMENT CONTRACTOR		
KV	KILOVOLT AMPERES		

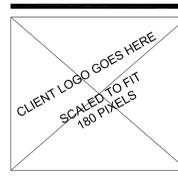
CODES

- CODES:**
- CALIFORNIA ELECTRIC CODE (CEC) 2019
 - CALIFORNIA BUILDING CODE (CBC) 2019
 - CALIFORNIA FIRE CODE (CFC) 2019
 - CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS TITLE 24 (T24) 2019
 - CALIFORNIA GREEN BUILDING STANDARD (CALGREEN) 2019
 - CALIFORNIA MECHANICAL CODE (CMC) 2019
 - CALIFORNIA PLUMBING CODE (CPC) 2019
- NOTE:** AMERICAN CANYON, CALIFORNIA
- DEFERRED SUBMITTALS:**
- FIRE ALARM DESIGN
 - SIGNAGE (EXCEPT EXIT SIGNS)
 - EERC SYSTEM DESIGN
 - FIRE SPRINKLER DESIGN
 - TEMPORARY POWER
- TEMPERATURE LIMITATION OF CONDUCTORS:**
- ADDITIONAL ADJUSTMENTS FOR CONDUITS EXPOSED TO SUNLIGHT ON OR ABOVE ROOFTOPS SHALL BE FACTORED PER NEC TABLE 310.15(B)(2)(C)

- LOW LEVEL EXIT SIGNS ARE NOT REQUIRED IN THE CORRIDORS FOR APARTMENT BUILDINGS (ONLY IN CORRIDORS OF HOTELS)**
- CARBON MONOXIDE DETECTORS:**
- CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN ALL GUESTROOM UNITS (SLEEPING UNITS) PER CBC 420.4. THEY SHALL BE LOCATED ON THE CEILING OUTSIDE OF EACH SEPARATE BEDROOM OR WITHIN THE BEDROOM FOR STUDIO UNITS.
- ROOMS WITH FUEL BURNING APPLIANCES. THEY ARE TO BE MONITORED BY THE FIRE ALARM SYSTEM.

DRAWING INDEX

DWG	DESCRIPTION	INCLUDED IN SET	SHEETS WITH REVISIONS
E-000	GENERAL NOTES, LEGEND & INDEX		
E-001	LUMINAIRE SCHEDULE		
E-100	SITE POWER PLAN		
E-101	SITE LIGHTING PLAN		
E-102	SITE PHOTOMETRIC PLAN		
E-20A1	POWER PLAN BUILDING A LEVEL 1		
E-20A2	POWER PLAN BUILDING A LEVEL 2		
E-20A3	POWER PLAN BUILDING A LEVEL 3		
E-20A4	POWER PLAN BUILDING A ROOF		
E-20B1	POWER PLAN BUILDING B LEVEL 1 & 2		
E-20B2	POWER PLAN BUILDING B LEVEL 3 & ROOF		
E-20C1	POWER PLAN BUILDING C LEVEL 1		
E-20C2	POWER PLAN BUILDING C LEVEL 2		
E-20C3	POWER PLAN BUILDING C LEVEL 3		
E-20C4	POWER PLAN BUILDING C ROOF		
E-201	POWER ENLARGED PLAN BUILDING A		
E-30A1	LIGHTING PLAN BUILDING A LEVEL 1		
E-30A2	LIGHTING PLAN BUILDING A LEVEL 2		
E-30A3	LIGHTING PLAN BUILDING A LEVEL 3		
E-30A4	LIGHTING PLAN BUILDING A ROOF		
E-30B1	LIGHTING PLAN BUILDING B LEVEL 1 & 2		
E-30B2	LIGHTING PLAN BUILDING B LEVEL 3 & ROOF		
E-30C1	LIGHTING PLAN BUILDING C LEVEL 1		
E-30C2	LIGHTING PLAN BUILDING C LEVEL 2		
E-30C3	LIGHTING PLAN BUILDING C LEVEL 3		
E-30C4	LIGHTING PLAN BUILDING C ROOF		
E-301	LIGHTING ENLARGED PLAN BUILDING A		
E-400	DWELLING UNIT ELECTRICAL PLANS		
E-500	ONE-LINE DIAGRAM		
E-501	LOAD CALCS & PANEL SCHEDULES		
E-600	DETAILS & DIAGRAMS		
E-601	DETAILS & DIAGRAMS		



CRP Affordable Housing

4455 MORENA BOULEVARD SUITE 107 SAN DIEGO, CA 92117

NAPA COVE APARTMENTS

XXXX BROADWAY American Canyon, CA

Date Issued For 09/24/2021 100% SCHEMATIC DESIGN

LEGEND

#	LIGHT FIXTURE CALLOUT	TV	TELEVISION CABLE OUTLET
⊗	ILLUMINATED EXIT SIGN, ARROWS AS INDICATED	◀	TELEPHONE OUTLET, MOUNTED AT 18" UNLESS OTHERWISE INDICATED
\$	SINGLE POLE, SINGLE THROW LIGHT SWITCH, 20A (WP = WEATHERPROOF COVER)	◀HP	HOUSE TELEPHONE OUTLET, MOUNTED AS INDICATED ON PLANS
\$3	THREE-WAY LIGHT SWITCH, 20A	◀	DATA OUTLET, MOUNTED AT 18" UNLESS OTHERWISE INDICATED
\$4	FOUR-WAY LIGHT SWITCH, 20A	◀	TELEPHONE & DATA OUTLET IN DUPLEX BOX
\$4	TIMER SWITCH	◀WIFI	WIRELESS ACCESS POINT, PROVIDE CAT 6 TO LOCATION WITH A 20' SERVICE LOOP. SYSTEM IS DESIGN/BUILD.
⊥	DIMMER SWITCH	◀	SINGLE GANG JBOX WITH 1 DATA AND 1 TV OUTLET
\$	SWITCH, SINGLE POLE; WITH SWITCHING SUBSCRIPT 'd'	□	PANELBOARD
\$3	DUAL SWITCHES, BOTH WITH OCCUPANCY SENSOR CONTROL	□	ELECTRICAL DISTRIBUTION EQUIPMENT
\$OS	OCCUPANCY SENSOR, WALL MOUNTED	□	CIRCUIT BREAKER DISCONNECT SWITCH
⊗	OCCUPANCY SENSOR, CEILING MOUNTED	□	NON-FUSED DISCONNECT SWITCH
⊗	PHOTOCELL	□	FUSED DISCONNECT SWITCH
⊗	SINGLE RECEPTACLE, GROUNDED	⊗	MAGNETIC MOTOR STARTER
⊗	DUPLEX RECEPTACLE	⊗	COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT SWITCH
⊗	DUPLEX RECEPTACLE, 1/2 HOT	VFD	VARIABLE FREQUENCY DRIVE
⊗ IG	DUPLEX RECEPTACLE, ISOLATED GROUND	□	CONTACTOR
⊗ GFCI	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTION (GFCI)	TS	TIME SWITCH
M1	OCCUPANCY SENSOR/GUESTROOM MANAGEMENT SYSTEM CONTROLLED DUPLEX RECEPTACLE. M2 INDICATES BOTH PLUGS CONTROLLED. M1 INDICATES ONE PLUG IS CONTROLLED, OTHER PLUG IS NOT CONTROLLED/HOT 24/7	⊕	THERMOSTAT
M2	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTION (GFCI) LOCATED ABOVE COUNTER	◇	MOTOR CONNECTION
USB	COMBINATION DUPLEX RECEPTACLE/USB CHARGER OUTLET	\$M	MOTOR RATED SWITCH
⊗ WP GFCI	DUPLEX RECEPTACLE, GFCI WITH WEATHERPROOF COVER EXTRA DUTY AND WEATHER RESISTANT RECEPTACLE	T	TRANSFORMER
⊗	FLOOR OUTLET BOX WITH DUPLEX RECEPTACLE	LC	LIGHTING CONTROLS
⊗	FLOOR OUTLET BOX WITH DUPLEX RECEPTACLE & LOW VOLTAGE OUTLETS	□	2-WAY COMMUNICATION DEVICE, REFER TO DETAIL 4/E6.03
⊗	SPECIAL PURPOSE RECEPTACLE AS NOTED	□	DOORBELL
⊗	JUNCTION BOX	□	DOORBELL CHIME
⊗	EQUIPMENT CONNECTION, REFER TO DESCRIPTION ON PLANS FOR WHICH SPECIFIC EQUIPMENT CONNECTION.	□	DOORBELL XFMR
⊗	COMMON EQUIPMENT CONNECTIONS:	⊗	HEAT DETECTOR
⊗WH	120V CONNECTION TO WATER HEATERS	⊗	FIRE ALARM SYSTEM CONTROL PANEL
⊗EF	120V CONNECTION TO EXHAUST FAN	⊗	SPRINKLER FLOW SWITCH
⊗DAMPER	120V CONNECTION TO MOTORIZED DAMPER	⊗	SPRINKLER VALVE TAMPER SWITCH
⊗SD	120V CONNECTION TO FIRE ALARM SYSTEM DUCT MOUNT SMOKE DETECTOR	⊗	FIRE ALARM HORN/SSTROBE LIGHT
⊗SD	120V CONNECTION TO FIRE ALARM SYSTEM SMOKE DAMPER	⊗	FIRE ALARM HORN
⊗	CCTV SECURITY CAMERA	⊗	FIRE ALARM STROBE
⊗	DOOR ACCESS/CONTROL EQUIPMENT	⊗	MINI HORN
⊗	INTRUSION DETECTION (DOOR OR WINDOW)	⊗	FIRE ALARM PULL STATION
⊗	DOOR DETECTOR BUZZER IF PROPPED OPEN	⊗	CARBON MONOXIDE DETECTOR POWERED BY FIRE ALARM SYSTEM
⊗	EMERGENCY EXIT ONLY, DOOR TO HAVE SOUNDER WHEN OPEN	⊗	ELECTRO-MAGNETIC DOOR HOLDER, POWERED BY FIRE ALARM SYSTEM
⊗	DOOR CONTACT (TIED TO ACCESS CONTROL SYSTEM)	⊗	FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR AND HORN, GUESTROOM, A PART OF DESIGN/BUILD FIRE ALARM SYSTEM
⊗	DOOR TO AUTOMATICALLY OPEN IN A FIRE ALARM EVENT	⊗	FIRE ALARM COMBINATION PHOTOELECTRIC SMOKE DETECTOR, CARBON MONOXIDE DETECTOR, AND HORN, GUESTROOM, A PART OF DESIGN/BUILD FIRE ALARM SYSTEM.
⊗	KEY CARD READER ACCESS FOB	⊗	FIRE ALARM SYSTEM STROBE/SPEAKER

A PART OF THE DESIGN/BUILD FIRE ALARM SYSTEM

DESIGN/BUILD SYSTEMS

STRUCTURED CABLING (TELEPHONE, DATA, TV): DESIGN AND PROVIDE COMPLETE, OPERATING, AND FULLY FUNCTIONAL TEL/DATA/TV WIRING SYSTEM PER OWNER & VENDOR REQUIREMENTS. SEE PLANS FOR OUTLET LOCATIONS, WIRING REQUIREMENTS, AND SERVICE ENTRANCE REQUIREMENTS. SUCCESSFUL SUB-CONTRACTOR IS RESPONSIBLE FOR WIRING TERMINATIONS AT THE OUTLETS AND RESPONSIBLE FOR COORDINATING WITH VENDOR ON WIRING TERMINATIONS AT THE EQUIPMENT. COORDINATE WITH ALL THE OWNER REQUESTED VENDORS FOR SCOPE DIFFERENTIATION. COORDINATE TERMINATION TYPES WITH EQUIPMENT VENDOR. VERTICAL RISERS ARE TO BE IN RACEWAY, HORIZONTAL WIRING TO BE CABLE. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL CONDUIT AND LOW VOLTAGE WIRING WITH THE EXCEPTION OF WIRING UPSTREAM OF THE DEMARCATION AND TRUNKLINE CABLING (COORDINATE WITH VENDOR).	ELECTRONIC SURVEILLANCE (282300): DESIGN AND PROVIDE COMPLETE, OPERATING, AND FULLY FUNCTIONAL SECURITY CCTV CAMERA SYSTEM BASED ON OWNER REQUIREMENTS. ALL WIRING IS TO BE IN CONDUIT. CAMERAS TO BE WIRED TO A DVR LOCATED IN THE MANAGEMENT OFFICE. DVR TO HOLD 28 DAYS. CAMERAS TO BE GLOBE TYPE FOR REDUJSITING. REFER TO PLANS FOR LOCATIONS.
FIRE ALARM SYSTEM (283100): DESIGN AND PROVIDE COMPLETE, OPERATING, AND FULLY FUNCTIONAL FIRE DETECTION ALARM SYSTEM THAT MEETS ALL LOCAL CODES AND ORDINANCES. SUCCESSFUL SUB-CONTRACTOR SHALL SUBMIT FULL SET OF PLANS TO OWNER, INDICATING DEVICE LOCATIONS, WIRING, CONNECTIONS, AND SPECIAL MOUNTING DETAILS. REFER TO ELECTRICAL PLANS FOR MAIN EQUIPMENT LOCATIONS. SUBMIT PLANS AND OBTAIN PERMIT FROM LOCAL AHJ. DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY AND ARE ONLY INTENDED AS DESIGN INTENT.	ACCESS CONTROL (281300): DESIGN AND PROVIDE COMPLETE, OPERATING, AND FULLY FUNCTIONAL FOB ENTRY SYSTEM WITH ENTRY CALL BOX BASED ON OWNER REQUIREMENTS. CARD READER SYSTEM TO BE PROGRAMMABLE WITH TIME ACCESS LIMITATIONS, AND TRACK USER DATA.
ALL DWELLINGS UNITS AND SLEEPING UNITS SHALL BE PRE-WIRED TO SUPPORT FUTURE INSTALLATION OF VISIBLE NOTIFICATION APPLIANCES IN ALL UNITS. THE WIRING SHALL NOT BE LIMITED TO FIRE ALARM NOTIFICATION CIRCUITS AND THE ASSOCIATED JUNCTION BOXES, AND DESIGN MAY INCLUDE SIGNALING LINE OR INITIATING CIRCUITS, IN LIEU OF ACTUAL PRE-WIRING. APPROVED ELECTRICAL CONDUIT INSTALLED IN ALL UNITS WITH SUITABLE JUNCTION BOXES AND DIRECT TERMINATION AT THE FIRE ALARM CONTROL UNIT LOCATION WOULD BE AN ACCEPTABLE ALTERNATIVE. THE FIRE ALARM DESIGNER SHALL PROVIDE COMPLETE PLANS, WHICH SHALL INCLUDE DETAILS SHOWING HOW FUTURE VISIBLE APPLIANCE EXPANSIONS ARE TO BE ACCOMPLISHED. VISIBLE APPLIANCES, CONNECTIONS TO SMOKE ALARMS OR SYSTEM DETECTORS AND ADDITIONAL FIRE ALARM EQUIPMENT (NAC PANELS, POWER SUPPLIES, BATTERIES, ETC) NECESSARY FOR FUTURE EXPANSION NEED NOT BE INSTALLED UNTIL VISIBLE APPLIANCES ARE DEMED NECESSARY.	EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS): CONTRACTOR SHALL PROVIDE A FULLY FUNCTIONAL AND CODE COMPLIANT ERRCS SYSTEM TO PROVIDE SUFFICIENT RADIO COVERAGE THROUGHOUT THE BUILDING. GENERAL CONTRACTOR SHALL CARRY A BUDGET TO COVER A FULL COVERAGE SYSTEM. DESIGN/BUILD CONTRACTOR SHALL PROVIDE DESIGN PLANS FOR DESIGN TEAM TO REVIEW. HEADEND EQUIPMENT TO BE LOCATED IN A LOCATION FOR EASY VENTILATION.
FIRE SMOKE DAMPERS REQUIRE A SMOKE DETECTOR TO BE LOCATED WITHIN ALL ROOMS SERVED BY THE DUCT SYSTEM TO INITIATE FIRE SMOKE DAMPER ACTUATION & HVAC UNIT SHUTDOWN. THIS IS TO BE INCORPORATED INTO THE FIRE ALARM SYSTEM. CBC 717.3.3.2.5	2-WAY COMMUNICATION SYSTEM: CONTRACTOR SHALL PROVIDE A FULLY FUNCTIONAL AND CODE COMPLIANT 2-WAY COMMUNICATION SYSTEM. PLANS ARE TO BE SUBMITTED TO THE LOCAL FIRE DEPARTMENT FOR PERMITTING. DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY AND ARE ONLY INTENDED AS DESIGN INTENT.
LOW FREQUENCY AUDIBLE NOTIFICATION APPLIANCES ARE REQUIRED WITHIN ALL SLEEPING UNITS.	DOOR HARDWARE: CONTRACTOR IS TO PROVIDE ALL LINE VOLTAGE AND LOW VOLTAGE WIRING TO DOOR HARDWARE, DOOR ACCESS, DOOR ALARMS, AND DOOR BUZZER EQUIPMENT. COORDINATE ALL LOCATIONS OF DEVICES AND REQUIREMENTS BASED ON SPECIFICATIONS VENDOR SHOP DRAWINGS.
	PHOTOVOLTAIC SYSTEM: CONTRACTOR SHALL PROVIDE A FULLY FUNCTIONAL AND CODE COMPLIANT PHOTOVOLTAIC SYSTEM. PLANS ARE TO BE SUBMITTED TO THE LOCAL AHJ FOR PERMITTING. ALL WORK IS TO BE COORDINATED WITH THE DESIGN DOCUMENTS AND OTHER TRADES. ROOF CONDUITS ARE NOT TO CROSS ROOF PATHWAYS. COORDINATE SIZE OF SYSTEM WITH OWNER GREEN GOALS.

PRE-CONSTRUCTION MEETING

CONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH THE ENGINEER FOR THE PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING ANY EQUIPMENT OR PERFORMING ANY WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT SITE ON A DATE AND TIME TO BE MUTUALLY AGREED. THE MEETING WILL BE A WORKING SESSION. THE MEETING WILL BE FACILITATED BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DETAILED REVIEW OF THE PLANS AND SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR COORDINATION ISSUES, REVIEW OF PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND METHODS, AND ON-SITE INVESTIGATION OF FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THAT COULD AFFECT THE WORK. PERSONS ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF THE PROJECT AND SHALL BE THE SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PROJECT THROUGHOUT TO COMPLETION. IF REQUIRED, REVISED PLANS WILL BE ISSUED THROUGH OFFICIAL CHANNELS. CHANGES IN THE BID PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILL BE ISSUED UNLESS PROCESSED THROUGH OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD THAT THE ENGINEER HAS NO AUTHORITY TO ISSUE CHANGE ORDERS.

THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE MINIMUM TIME INDICATED:

MECHANICAL SHEET METAL	2 HOURS
PLUMBING/PIPING	2 HOURS
ELECTRICAL	2 HOURS
GENERAL CONTRACTOR	ALL SESSIONS

BIDDING NOTES

THE FOLLOWING SYSTEMS ARE TO BE INCLUDED IN THE BIDDING OF THE PROJECT. ANY QUESTIONS NEED TO BE PRESENTED DURING THE BIDDING PHASES. CHANGE ORDERS ARE NOT ALLOWED FOR ANY OF THE ITEMS LISTED BELOW:

- POWER TO ALL POWERED DOORS INCLUDING GARAGE DOOR AND ALL NECESSARY WIRING & CONNECTIONS.
- POWER TO ALL ELECTRONIC DOOR STRIKES (FROM NEAREST 120V GENERAL PURPOSE RECEPTACLE CIRCUIT).
- RACKING IN PBX ROOM AND IDF
- SMOKE GUARDS: PROVIDE 120V POWER TO DEVICE AND FIRE ALARM SMOKE DETECTOR LOCATED OUTSIDE EACH PAIR OF ELEVATOR DOORS. REFER TO ARCH PLANS FOR LOCATIONS AND QUANTITY. COORDINATE WITH FIRE ALARM CONTRACTOR.
- ALL NECESSARY ROOF PENETRATIONS TO THE LIGHTING AND EQUIPMENT SHOWN PER PLANS.
- ALL RECESSED ITEMS PENETRATING RATED ASSEMBLIES SHALL BE PROVIDED WITH FIRE RESISTANT PROTECTION. CONTRACTOR SHALL PROVIDE FIRE PROTECTIVE DEVICES (INCLUDING LUMINAIRES AND BOXES) TO MAINTAIN FIRE RATING.
- ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE CAULKING AND PUTTY PADS FOR PENETRATIONS THROUGH RATED ASSEMBLIES.
- ELECTRICAL CONTRACTOR SHALL PROVIDE WIRING FOR DUCT SMOKE DETECTORS.
- ALL FLOOR OUTLETS TO BE BRASS. PROVIDE AND INSTALL STEEL CITY SERIES FLOOR BOX 664-SC UNLESS OTHERWISE NOTED.
- INSTALLATION OF ALL LOW VOLTAGE LIGHTING TRANSFORMERS AND REMOTE DRIVERS. NOT SHOWN ON PLANS TO BE COORDINATED BY THE ELECTRICAL CONTRACTOR.
- LIGHTING IN GARAGES AND BOH SPACES: LIGHT FIXTURES AND EXIT SIGNS MAY NOT BE SUSPENDED DUE TO OTHER TRADES & INSULATION. PROVIDE HANGING SUPPORTS WHERE NECESSARY. IN GARAGES OVER 10-FT HIGH, PROVIDE HANGERS TO MOUNT AT A MAX OF 10-FT.
- POWER TO ALL FIRE ALARM POWER SUPPLIES (PER DESIGN/BUILD FIRE ALARM PLANS).
- UTILITY COMPANY REMOTE METER CONDUIT AND ANTENNA JBOX AS SHOWN PER PLANS.
- PUMPS: CONDUIT AND WIRING FROM THE PUMP TO THE CONTROL BOX. CONTROLLER LOCATION TO BE PER PLUMBING CONTRACTOR.
- AMENITY AREA COOKING HOODS TO HAVE ACCESSIBLE CONTROLS. ON/OFF SWITCH MAY NOT BE COMPATIBLE WITH THE SPECIFIED RATED ASSEMBLIES.
- RECORD: PROVIDE BROWN 66W REMOTE 3-BUTTON WALL SWITCH WITH BROWN 40000-SERIES HOODS AS BASIS OF DESIGN. CONFIRM WITH ID PLANS PRIOR TO ANY INSTALLATION.

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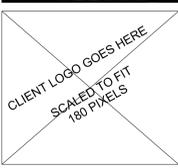
21708 Highway 99 Lynnwood, WA 98036 425-741-1200 tel / 1201 fax

550 South Hope Street Suite 2500 Los Angeles, California 90071 USA (213) 542-4500 WWW.HED.DESIGN

GENERAL NOTES, LEGEND & INDEX

LUMINAIRE SCHEDULE

Table with columns: CALLOUT, SYMBOL, DESCRIPTION, LAMP, BALLAST, MOUNTING, MODEL #, INPUT WATTS, VOLTS, NOTES, NOTES. Contains 24 rows of lighting fixture specifications.



CRP Affordable Housing

4455 MORENA BOULEVARD SUITE 107 SAN DIEGO, CA 92117

NAPA COVE APARTMENTS

XXXX BROADWAY American Canyon, CA

Date Issued For 09/24/2021 100% SCHEMATIC DESIGN

NOT FOR CONSTRUCTION

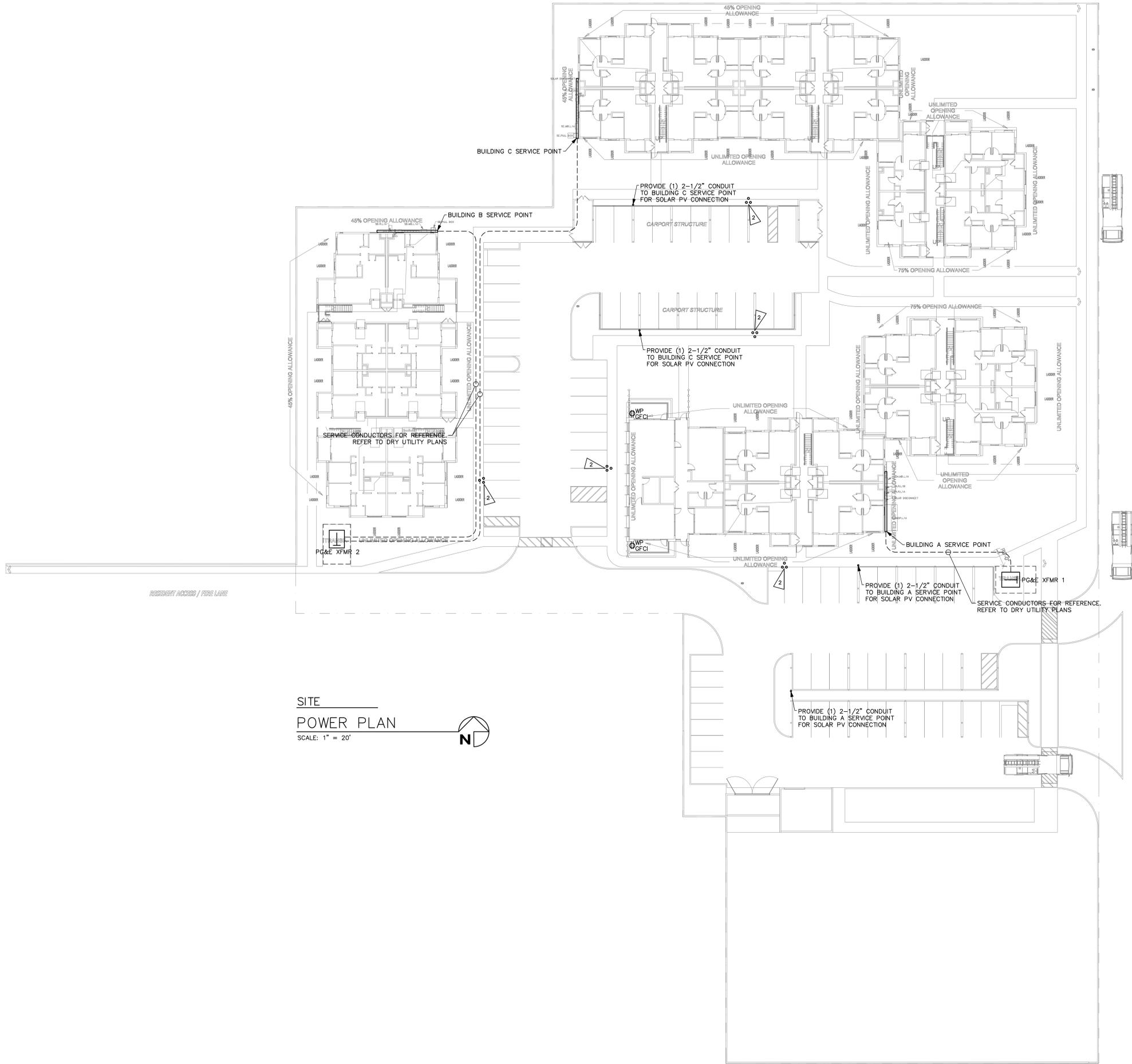


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LUMINAIRE SCHEDULE

E-001

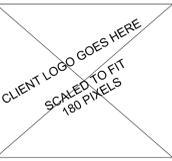
CA TITLE 24 2019 - RESIDENTIAL LIGHTING - ALL IN-UNIT FIXTURES TO BE HIGH EFFICACY. - ALL INSEPERABLE LED'S TO BE JAB APPENDIX APPROVED. - ALL MEDIUM BASED + GU24 LED LAMPS TO BE JAB-2016-E APPROVED (WITH MARKINGS) - ALL RECESSED DOWNLIGHTS TO BE JAB APPENDIX APPROVED - DOCUMENTATION FOR THE ABOVE JAB + JAB-2016-E REQUIREMENTS SHALL BE PROVIDED DURING SUBMITTAL PROCESS. - ALL FORWARD PHASE CUT DIMMERS USED WITH LED SHALL COMPLY WITH NEMA SSL 7A



SITE
POWER PLAN
SCALE: 1" = 20'

FLAG NOTES:

- 1 FUTURE SINGLE PORT EV PARKING. PROVIDE (1) 1-1/2" CONDUIT FROM EV PANEL FOR LINE-VOLTAGE POWER (REQUIRES ONE 40-AMP CIRCUIT). PROVIDE (1) 1/2" CONDUIT FROM PBX ROOM FOR LOW VOLTAGE DATA CABLE. TERMINATE IN JBOX 6" AFF. PANEL CIRCUIT DIRECTORY SHALL IDENTIFY OCPD SPACE RESERVED FOR FUTURE EV PARKING AS 'EV CAPABLE'
- 2 FUTURE DUAL PORT EV PARKING. PROVIDE (2) 1-1/2" CONDUIT FROM EV PANEL FOR LINE-VOLTAGE POWER (REQUIRES TWO 40-AMP CIRCUITS). PROVIDE (1) 1/2" CONDUIT FROM PBX ROOM FOR LOW VOLTAGE DATA CABLE. TERMINATE IN JBOX 6" AFF. PANEL CIRCUIT DIRECTORY SHALL IDENTIFY OCPD SPACE RESERVED FOR FUTURE EV PARKING AS 'EV CAPABLE'



CRP Affordable Housing

4455 MORENA BOULEVARD
SUITE 107
SAN DIEGO, CA 92117

NAPA COVE APARTMENTS

XXXX BROADWAY
American Canyon, CA

Date Issued For
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SHEET NOTES:

- 1. NOT USED

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Suite 2500
Los Angeles, California
90071 USA
(213) 542-4500
WWW.HED.DESIGN

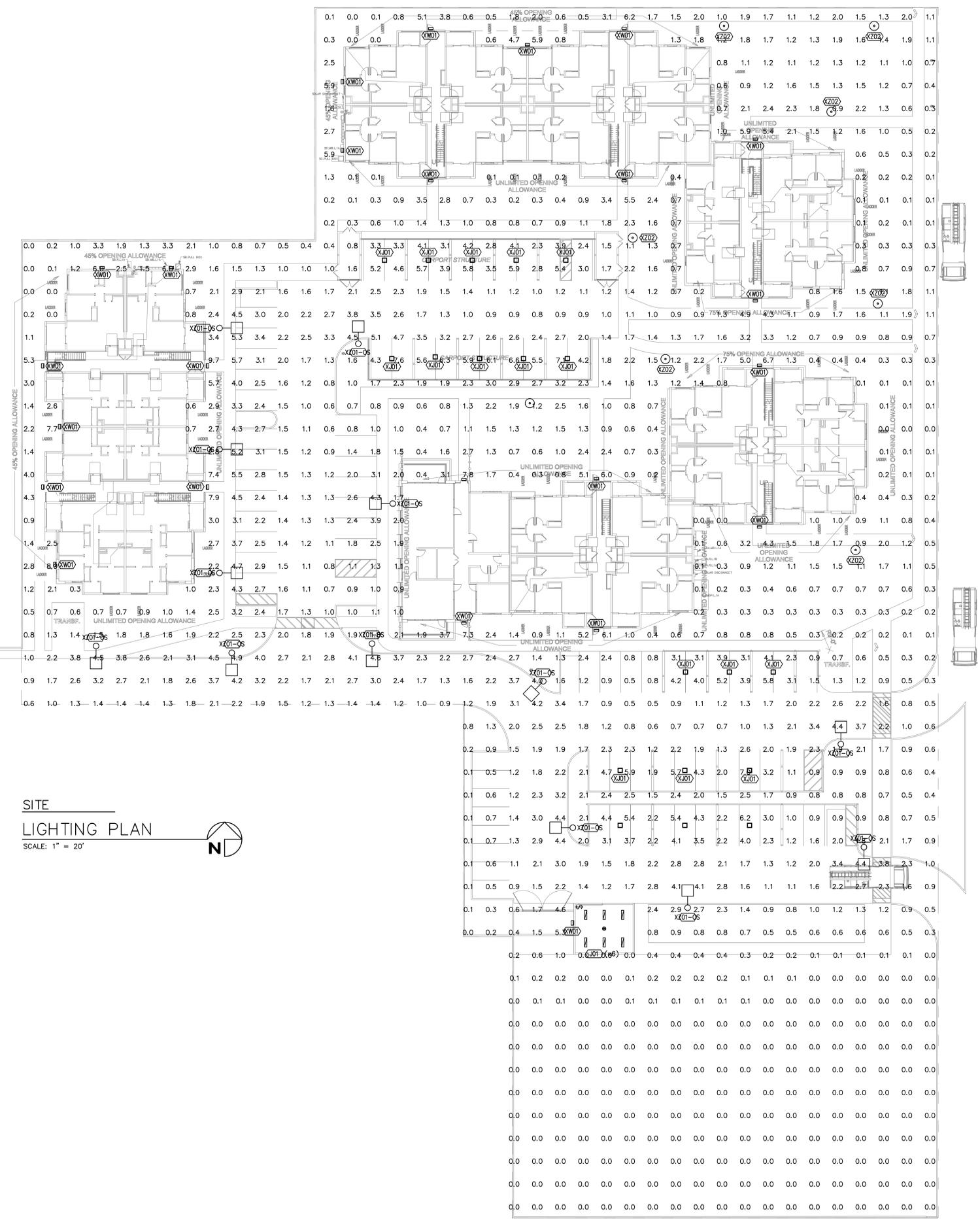
2295-003

SITE POWER PLAN

E-100

RESIDENT ACCESS / PARK LANE

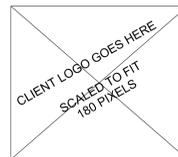
BROADWAY (HIGHWAY 29)



SITE LIGHTING PLAN
 SCALE: 1" = 20'

FLAG NOTES:

NOT USED



CRP Affordable Housing

4455 MORENA BOULEVARD
 SUITE 107
 SAN DIEGO, CA 92117

NAPA COVE APARTMENTS

XXXX BROADWAY
 American Canyon, CA

Date Issued For
 09/24/2021 100% SCHEMATIC DESIGN

SHEET NOTES:

1. ALL EXTERIOR LIGHTING TO BE CONTROLLED BY AN ASTRONOMICAL TIMELOCK AND PHOTOCELL, UNLESS INDICATED OTHERWISE AT CIRCUIT HOMERUN. SEE DETAIL 2/E6.01
2. POLE BASE HEIGHTS:
 24" AFG FOR FIXTURES AT PARKING AREAS
 6" AFG FOR ALL OTHER AREAS

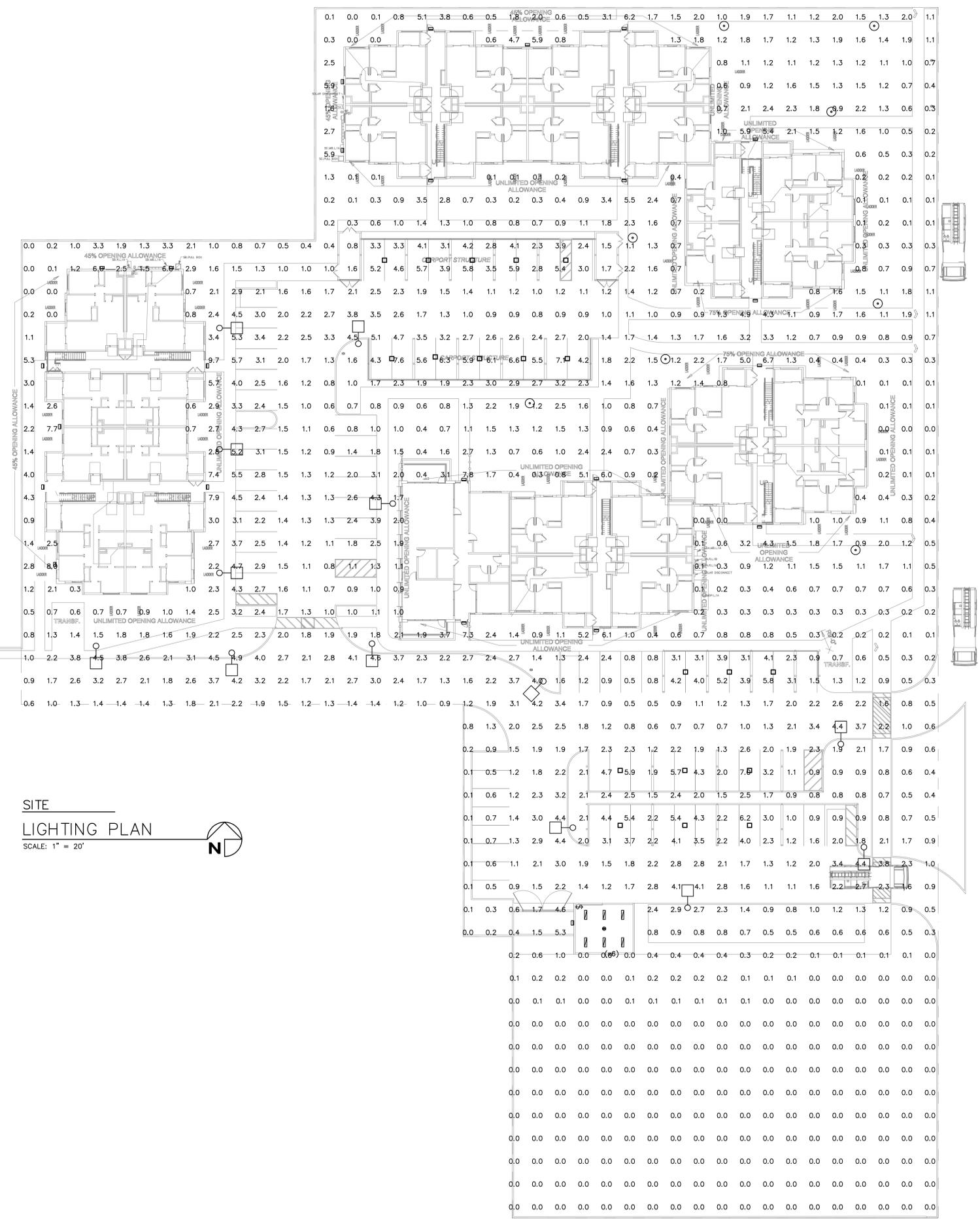
NOT FOR CONSTRUCTION



FOR REFERENCE ONLY

2295-003
 SITE LIGHTING PLAN

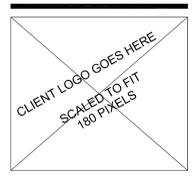
E-101



SITE
LIGHTING PLAN
SCALE: 1" = 20'

FLAG NOTES:

NOT USED



CRP Affordable Housing

4455 MORENA BOULEVARD
SUITE 107
SAN DIEGO, CA 92117

NAPA COVE APARTMENTS

XXXX BROADWAY
American Canyon, CA

Date Issued For
09/24/2021 100% SCHEMATIC DESIGN

SHEET NOTES:

1. ALL EXTERIOR LIGHTING TO BE CONTROLLED BY AN ASTRONOMICAL TIMELOCK AND PHOTOCELL, UNLESS INDICATED OTHERWISE AT CIRCUIT HOMERUN. SEE DETAIL 2/E6.01
2. POLE BASE HEIGHTS:
24" AFG FOR FIXTURES AT PARKING AREAS
6" AFG FOR ALL OTHER AREAS

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2295-003
SITE
PHOTOMETRIC
PLAN

E-102

Napa Cove Apartments Initial Study/Addendum to the Broadway District Specific Plan Environmental Impact Report (SCH #2017042025)

CITY OF AMERICAN CANYON, NAPA COUNTY, CALIFORNIA

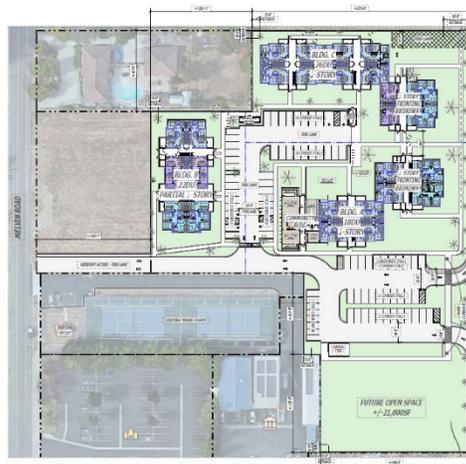
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Prepared By:

WRA, Inc.
2169-G East Francisco Boulevard
San Rafael, California 94901



Date:

December 2021



TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS..... I

1.0 INTRODUCTION 1

1.1 BACKGROUND AND PURPOSE 1

 1.1.1 *Purpose of Addendum* 1

1.2 INITIAL STUDY/ENVIRONMENTAL CHECKLIST..... 1

1.3 ENVIRONMENTAL ANALYSIS AND CONCLUSIONS 1

 1.3.1 *Findings* 2

 1.3.2 *Conclusions*..... 2

1.4 MITIGATION MONITORING AND REPORTING PROGRAM..... 3

2.0 PROJECT BACKGROUND AND DESCRIPTION..... 4

2.1 BROADWAY DISTRICT SPECIFIC PLAN AND ENVIRONMENTAL IMPACT REPORT 4

 2.1.1 *Broadway District Specific Plan* 4

 2.1.2 *Broadway District Specific Plan Environmental Impact Report* 4

2.2 NAPA COVE APARTMENTS 5

 2.2.1 *Project Location and Elements* 5

 2.2.2 *General Plan and Zoning* 5

 2.2.2 *Site Access and Parking* 6

 2.2.3 *Architectural Design* 6

 2.2.4 *Utilities* 6

 2.2.5 *Construction and Operation* 7

2.4 DISCRETIONARY APPROVALS..... 7

3.0 CEQA CHECKLIST 8

3.1 EXPLANATION OF CHECKLIST EVALUATION CATEGORIES 8

3.2 DISCUSSION AND MITIGATION SECTIONS 9

 3.2.1 *Aesthetics* 10

 3.2.2 *Agriculture and Forestry Resources*..... 13

 3.2.3 *Air Quality*..... 17

 3.2.4 *Biological Resources* 23

 3.2.5 *Cultural Resources*..... 29

 3.2.6 *Energy*..... 32

 3.2.7 *Geology and Soils* 34

 3.2.8 *Greenhouse Gas Emissions*..... 41

 3.2.9 *Hazardous and Hazardous Materials* 44

 3.2.10 *Hydrology and Water Quality*..... 49

 3.2.11 *Land Use and Planning* 54

 3.2.12 *Mineral Resources* 56

 3.2.13 *Noise*..... 57

 3.2.14 *Population and Housing* 61

 3.2.15 *Public Services* 63

 3.2.16 *Recreation* 67

 3.2.17 *Transportation*..... 69

 3.2.18 *Tribal Cultural Resources*..... 73

 3.2.19 *Utilities and Service System*..... 76

 3.2.20 *Wildfire*..... 81

 3.2.21 *Mandatory Findings of Significance* 85

7.0 REFERENCES 88

8.0 LIST OF PREPARERS..... 89

PROJECT APPLICANT	89
ENVIRONMENTAL CONSULTANT	89

LIST OF APPENDICES

Appendix A	Location Figures
Appendix B	Site Plan
Appendix C	Health Risk Analysis
Appendix D	Biological Resources Technical Report
Appendix E	Cultural Resources Study
Appendix F	Earthquake Fault Investigation Report
Appendix G	Geotechnical Engineering Investigation Report
Appendix H	Phase I Environmental Site Assessment
Appendix I	Phase II Environmental Site Assessment
Appendix J	Preliminary Stormwater Control Plan
Appendix K	Preliminary Hydrology Analysis
Appendix L	Noise and Vibration Assessment
Appendix M	Traffic Study
Appendix N	Preliminary Sanitary Sewer Flow Generation Calculations
Appendix O	Water Demand Calculations

ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing materials
BAAQMD	Bay Area Air Quality Management District
BDSP	Broadway District Specific Plan
BMPs	best management practices
CAL FIRE	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of American Canyon
CNEL	Community Noise Equivalent Level
CO ₂ e	carbon dioxide equivalent
dBA	A-weighted decibel
EECAP	Energy Efficiency Climate Action Plan
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
GHG	greenhouse gas
gpd	gallons per day
HRA	Health Risk Analysis
HVAC	heating, ventilation, and air conditioning system
Ldn	day/night average sound level
LID	Low Impact Development
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MERV	minimum efficiency reporting value
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MT	metric tons
NAHC	Native American Heritage Commission
NCMJHMP	Napa County Multi-Jurisdictional Hazard Mitigation Plan
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System

PG&E	Pacific Gas & Electric Company
PPV	peak particle velocity
PRC	Public Resource Code
project or proposed project	Napa Cove Apartments Project
SCH	State Clearinghouse
SR-29	State Route 29
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminants
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

1.1 Background and Purpose

1.1.1 Purpose of Addendum

The project applicant, CRP Affordable Housing & Development, is proposing to develop a 66-unit affordable housing complex (Napa Cove Apartments, project) within the Broadway District in the City of American Canyon, in Napa County, California. The American Canyon Municipal Code Section 19.27.020 Subsection B. 3. offers up to three (3) incentives for affordable housing development projects. The project applicant is requesting three (3) incentives for the project, including:

1. Reduced parking
 - a. Reduce the 141 required parking spaces (66 covered and 75 uncovered) to 84 parking spaces to include all carports, open parking and electric charging stations and accessible spaces.
 - b. Waive the guest parking requirements with reliance on adjacent street parking instead.
2. Reduce the Broadway District Specific Plan (BDSP) required building separation from 35 feet to 30 feet 4 inches.
3. Reduce the BDSP development standard requirements for balconies and open patios from 6 feet to 8 feet respectively to allow for balconies with 5 feet 8 inches to 5 feet 10 inches deep and patios with 7 feet 2 inches deep.

This Addendum, checklist, and attached supporting documents have been prepared to determine whether and to what extent the BDSP Environmental Impact Report (EIR) prepared for the City of American Canyon (City) remains sufficient to address the potential impacts resulting from the three (3) incentives requested by the project applicant.

1.2 Initial Study/Environmental Checklist

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

1.3 Environmental Analysis and Conclusions

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

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

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

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or ND . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;¹
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or ND . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, or the ND was adopted . . . shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR or ND;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR or ND;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or ND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative (CEQA Guidelines, Section 15162, subd. (a); see also PRC, Section 21166).

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

1.3.1 Findings

There are no substantial changes proposed by the project or in the circumstances in which the project will be undertaken that require major revisions of the BDSP EIR. The proposed revisions do not require preparation of a new subsequent or supplemental EIR, due to either the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. As illustrated herein, the proposed project is consistent with the previous EIR and requesting incentives that are allowed according to American Canyon Municipal Code Section 19.27.020 Subsection B. 3.; therefore, an Addendum is the appropriate method of documenting CEQA compliance for the project.

1.3.2 Conclusions

The City may grant the incentives requested by the project applicant and may also approve the proposed project based on this Addendum. The impacts of the proposed project remain within the impacts previously analyzed in the EIR (CEQA Guidelines § 15164). The proposed project does not require any

¹ CEQA Guidelines Section 15382 defines “significant effect on the environment” as “... a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals flora, fauna, ambient noise, and objects of historic or aesthetics significance...”

major revisions to the EIR. No new significant information or changes in circumstances surrounding the proposed project have occurred since the certification of the EIR. Therefore, the previous CEQA analyses completed for the BDSP remain adequate. The applicable mitigation measures from the EIR would be imposed on the proposed project as described herein.

1.4 Mitigation Monitoring and Reporting Program

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

2.0 PROJECT BACKGROUND AND DESCRIPTION

2.1 Broadway District Specific Plan and Environmental Impact Report

2.1.1 Broadway District Specific Plan

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

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

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

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

There are nine subareas within the BDSP: Downtown Core, Broadway Residential, Business Park, Medium Density Residential, Home Improvement, Northern Gateway, Southern Gateway, Southeast Area Specific Plan, and Local Serving Mixed-Use. Each subarea is further divided into zoning districts to identify specific land uses that are allowed within the subareas and to establish standards that govern future development.

2.1.2 Broadway District Specific Plan Environmental Impact Report

The American Canyon City Council certified the 2019 BDSP EIR (State Clearinghouse [SCH] No. 2017042025) on June 18, 2019. The BDSP EIR was prepared in accordance with CEQA to evaluate the

potential environmental impacts associated with the implementation of the BDSP. The EIR evaluated the following components:

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

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

2.2 Napa Cove Apartments

2.2.1 Project Location and Elements

Napa Cove Apartments Project (project or proposed project) is an affordable housing development located west of Broadway (SR-29), east of Melvin Road and north of Donaldson Way in the City of American Canyon. The site is currently vacant, with residential and recreational uses to the south, residential uses to the west, residential and commercial uses to the north, and commercial, religious and hotel uses across SR-29 to the east.

There are currently three vacant, adjacent sites located within the Broadway Residential Subarea that would be merged to form the project site for a total of 3.48 acres. The project consists of 66 units across three (3) buildings (two- and three-story). The units would be 100 percent affordable. A site plan is provided in Appendix B. The project would include the following elements:

- Building A: two-story with 18 dwelling units and a community building.
- Building B: two-story and partial three-story with 22 dwelling units.
- Building C: two-story with 26 dwelling units.
- Surface parking: 49 covered parking spaces and 35 uncovered parking spaces.
- Common open space – Interior: multi-purpose rooms, patios, storage, leasing office, and laundry room.
- Common open space – Exterior: Tot Lot and Napa Cove Park.
- Other landscaping improvements.

2.2.2 General Plan and Zoning

According to the BDSP, the project site is located within the Broadway Residential zoning district. The intent for Broadway Residential zoning district is to accommodate single and multi-family “missing middle” residential uses in areas of minimal constraints and ready access to transportation and services.

² City of American Canyon. 2019. Broadway District Specific Plan Environmental Impact Report.

³ City of American Canyon. 2019. Resolution No. 2019-15.

Development in the Broadway Residential zoning district shall be within the range of 12 to 30 units per gross acre. As such the proposed project (approximately 20 units per acre) would meet both the zoning classification and density requirements per the Broadway Residential zoning district Intent.

2.2.2 Site Access and Parking

Access to the site is provided off Broadway (SR-29) to the east and Melvin Road to the west. Pedestrian access would be provided via a sidewalk developed along the project frontage on Broadway. Development of the project would include a total of 84 parking spaces. Short-term bicycle parking spaces would also be provided near each of the buildings.

2.2.3 Architectural Design

The project would be a campus style, multi-family housing development with three residential buildings consisting of 66 total dwelling units and various common interior amenity space. Each residential building would be approximately 34 feet in height, varying among two and three stories, and would provide a “Modern Industrial” architectural aesthetic.

The proposed Site Plan (Appendix B) attempts to accomplish two goals of cohesive and centralized common open space, while shielding and limiting the nuisance from SR-29. Common open space would include an approximately 1,860 square feet Tot Lot (ages 2-6), multiple Multi-Purpose rooms (with patios) that can be used as study rooms, game rooms, and various private event needs. Common open space for prospective residents would be supported by inward facing units with limiting highway-facing apartments. These internal spaces are shielded from the nuisance of SR-29 by limiting the opening between Buildings A & C and providing building perimeter along the north and south of the central common area.

The “Modern Industrial” aesthetic is derived from re-appropriating traditional industrial materials at a more residential scale. The proposed massing gesture contains a base “stucco chassis”, which is then pushed and pulled to highlight and distinguish various uses within the buildings. The stucco is intended to be a warm grey color with a medium sand finish. The warm grey provides a natural color to blend with its neighboring buildings.

From this “stucco chassis”, the architectural massing gathers the living areas of each unit with the adjacent central circulation spine of each building. These areas are clad in grey brick and extrude forward from the “stucco chassis”. Further distinguishing and highlighting the entry/exit point. The proposed grey brick is elongated to a more utility size brick and proposed as a stacked bond, providing a residential scale, yet industrial feel. The secondary accent material is a fiber-cement board, colored in “Brushwork Red” (or similar color). The red is to symbolize the traditional red hues of brick used in more industrial settings. This material is applied at recessed areas within the “stucco chassis” and mark the bedrooms of each unit.

Windows would be recessed and shaded at upper floors where sun orientation is strongest. Doors and windows would be vinyl clad, with charcoal-colored frames and mullions. Glazing would comply with acoustic recommendations and current California Title 24 requirements. Roof-mounted mechanical equipment would be shielded from off-site views with parapets.

2.2.4 Utilities

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

The project site is currently served by and would connect to existing utilities from the following providers:

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

2.2.5 Construction and Operation

For the purposes of the analysis contained in this Addendum, construction of the project is anticipated to start in May 2022 and would be fully occupied by January 2024. Because vehicle fuel use becomes more efficient through time in compliance with federal and State regulations, these dates support a conservative evaluation of potential impacts. If the actual dates of construction are delayed, associated effects would be reduced accordingly.

2.4 Discretionary Approvals

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

- Planning Commission or City Council Adoption of this Addendum
- Planning Commission or City Council grants the incentives requested by the project applicant

3.0 CEQA CHECKLIST

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

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

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

3.1 Explanation of Checklist Evaluation Categories

1) Conclusion in Prior Final EIR and Related Documents

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

2) Do the Proposed Changes Involve New Impacts?

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

3) New Circumstances Involving New Impacts?

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

4) New Information Requiring New Analysis or Verification?

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

- a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
- b) Significant effects previously examined will be substantially more severe than shown in the previous Final EIR;
- c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous final EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

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

5) Mitigation Measures Implemented or Addressed Impacts

Pursuant to CEQA Guidelines Section 15162, subd. (a)(3), this column indicates whether the Final EIR provides mitigation measures to address effects in the related impact category. Any previously adopted mitigation measures will be identified. The response will also address proposed revisions to previously adopted mitigation measures. These mitigation measures will be implemented with the construction of the project, as applicable. If “None” is indicated, the Final EIR has concluded that the impact either does not occur with this project or is not significant, and therefore no additional mitigation measures are needed.

3.2 Discussion and Mitigation Sections

1) Discussion

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

2) Mitigation Measures

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

3) Conclusions

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

3.2.1 Aesthetics

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

Discussion

a) *Have a substantial adverse effect on a scenic vista?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not have a substantial adverse effect on a scenic vista because the development would simply add to the existing development within the existing urban footprint and would not adversely affect views of any scenic vista from Oat Hill or from the former basalt plant/future Watson Ranch. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The proposed project's potential impacts would be consistent with the scenic vista analysis in the BDSP EIR. Construction and operation of the project in the Broadway Residential Subarea would not alter scenic views such as Oat Hill or the basalt plant beyond what was analyzed in the BDSP EIR. The proposed project would be approximately 42 feet height consistent with the maximum allowed building height within the

Broadway Residential Subarea. The project would involve development of campus style multi-family housing units that would be consistent with the proposed residential development characteristics of the BDSP in the Broadway Residential Subarea. The project would not introduce new environmental impacts related to a scenic vista or create more severe impacts than those analysis in the BDSP EIR. No additional analysis is required.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The existing visual attributes of the SR-29 viewshed within American Canyon displays a fragmented mix of commercial, industrial, and residential uses without a coherent aesthetic or sense of place visual appearance.

Consistent with the BDSP EIR, the development of multi-family housing on the project site would have a minimum of 30 feet setback from SR-29 consistent with the BDSP's development. The project would involve development of visually appealing buildings and landscaping, which would result in improvements to the appearance of the SR-29 viewshed. The proposed project would lead to improvements in the SR-29 viewshed consistent with the roadway's status as an "Eligible" State Scenic Highway.

The project site is currently undeveloped and consist of grasses, weedy vegetation, and a few scattered trees. No scenic resources are located within the project site. Therefore, the proposed project would not introduce new environmental impacts related to scenic resources or a State Scenic Highway or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The development of the proposed project would include development of a Tot Lot, a Napa Cove Park, and other landscaping improvements. The project would increase the amount of landscaping and trees from the existing conditions and would be a visual improvement over the existing condition of the site. The project site is located approximately 0.75 mile southeast of Oat Hill and would not alter public views from

oat Hill or of the former basalt plant/future Watson Ranch. Therefore, the proposed project would not introduce new environmental impacts related to applicable zoning and other regulations governing scenic quality or the visual character and quality of the site or public views of the site, or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

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

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

Consistent with the BDSP EIR, the development within the project site would use lighting consistent with the BDSP development standards and design guidelines. Lighting for the project would be required to employ full cut-off fixtures or be directed downward to avoid spillage onto adjoining properties or streets. Therefore, the proposed project would not introduce new environmental impacts related to the visual character or quality of the site and its surroundings or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.2 Agriculture and Forestry Resources

Would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impacts?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
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?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

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

Discussion

- 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?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The project site is within the BDSP boundaries, which do not support agricultural land use activities. The California Department of Conservation considers the project site Urban and Built-Up Land with no agriculture lands uses identified.⁴ Therefore, the proposed project would not introduce new environmental impacts related to the conversion of farmland land uses to non-agricultural land uses or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The project site is zoned as Broadway Residential and does not support agricultural uses. The project site would not be eligible for a Williamson Act contract. The proposed project would not introduce new

⁴ California Department of Conservation. 2021. California Importance Farmland Finder. Website: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed September 20, 2021.

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

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The project site is zoned as Broadway Residential and does not include any forest or timberland uses. No impact to forest or timberland would occur with development of housing units on the project site. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

- d) *Result in a loss of forest land or conversion of forest land to non-forest use?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

As discussed in Impact c) above, the project site does not contain forest uses. Development of the proposed project would not result in a loss of forest land or conversion of forest land to non-forest use. No impact would occur. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

Summary of BDSP EIR Analysis

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

Napa Cove Apartments Analysis

The project site does not contain agricultural or forest uses, which precludes the possibility of loss or conversion of agricultural or forestlands to non-agricultural or non-forest uses. No impact would occur. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.3 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:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<i>Significant and unavoidable impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM AIR-2, MM AIR-3, MM AIR-4a</i>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	<i>Significant and unavoidable impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM AIR-2, MM AIR-3</i>
c) Expose sensitive receptors to substantial pollutant concentrations?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM AIR-3, MM AIR-4a</i>
d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not conflict with the applicable provisions of the 2017 Clean Air Plan, and the BDSP's percent increase in residential units would be greater than the percent increase in Vehicle Miles Traveled (VMT). However, as the BDSP EIR disclosed, the BDSP would not further all of the primary goals of the 2017 Clean Air Plan as a result of significant and unavoidable impacts related to construction equipment and vehicle exhaust emissions. Because construction-generated impacts would remain significant after incorporation of mitigation, this impact would be significant and unavoidable. The City made appropriate findings and adopted a statement of overriding considerations.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. The most recent clean air plan is the Bay Area 2017 Clean Air Plan that was analyzed in the BDSP EIR. The proposed project would be required to implement BDSP EIR MM AIR-2, AIR-3, and AIR-4a to reduce impacts related to air quality pollutants emissions (as discussed in Impacts b) and c) below). However, the project could result in a significant and unavoidable impact related to construction equipment exhaust even with implementation of BDSP EIR MM AIR-3 (Impact b) below). Thus, the project would not further all the primary goals of the 2017 Clean Air Plan. The significant and unavoidable impact conclusion is consistent with the conclusion in the BDSP EIR related to conflict with or obstruct implementation of the applicable air quality plan. Therefore, the proposed project would not result in any new or more severe impacts beyond what was previously analyzed in the BDSP EIR No additional analysis is required.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Summary of BDSP EIR Analysis

Construction Fugitive Dust

It was stated in the BDSP EIR that construction activities associated with buildout of the BDSP would include demolition, site preparation, grading, building construction, paving, and architectural coating. Generally, one of the most substantial air pollutant emissions would be fugitive dust during construction activities. If uncontrolled, these emissions could lead to both health and nuisance impacts. Construction activities would also temporarily create emissions of equipment exhaust and other air contaminants. It was determined in the BDSP EIR that Mitigation Measure (MM) AIR-2 would be required to reduce impacts from fugitive dust emissions to less than significant levels.

Construction Equipment Exhaust

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

Operational Emissions

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

Operational Carbon Monoxide Hotspot

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

Napa Cove Apartments Analysis

Construction Fugitive Dust

The project construction activities were anticipated and analyzed in the BDSP EIR. Construction of the proposed project within the BDSP boundaries would be required to incorporate MM AIR-2 from the BDSP EIR to ensure that impacts from fugitive dust emissions during construction activities would be less than significant.

Construction Equipment Exhaust

The project construction activities and equipment were anticipated and analyzed in the BDSP EIR. Project construction would generate emissions of reactive organic gas, oxides of nitrogen, exhaust particulate matters, 10 micrometers or 2.5 micrometers or less in diameter, PM₁₀, and exhaust PM_{2.5}, respectively. The project would be required to implement BDSP EIR MM AIR-3 to reduce construction impacts. As discussed in the BDSP EIR, MM AIR-3 would not guarantee reductions in impacts from large construction projects involving extensive equipment and/or material transport necessary to be less than significant. This impact was determined to be significant and unavoidable. Construction of the project would utilize standard construction equipment analyzed in the BDSP EIR and would not result in any new or more severe impacts related to construction emissions beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

Operational Emissions

Implementation of the proposed project is anticipated and analyzed in the BDSP EIR. Development of the project would be consistent with the BDSP development standards and design guidelines. Therefore, the proposed project would not result in any new or more severe impacts related to operational emissions beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Operational Carbon Monoxide Hotspots

As previously discussed, the BDSP EIR determined that the intersection of SR-29 and American Canyon Road would experience the highest cumulative peak-hour traffic volumes among the BDSP study intersections, with 6,940 vehicles per hour during the PM peak-hour. The BDSP buildout would have less than significant impacts to operational carbon monoxide hotspots with the anticipated vehicle volume at the highest volume intersection. Implementation of the proposed project is anticipated and analyzed in the BDSP EIR. The proposed project would not increase the traffic volume at the intersection of SR-29 and American Canyon Road. Therefore, the proposed project would not result in any new or more severe impacts related to operational carbon monoxide emissions beyond what was analyzed in the BDSP EIR. No additional analysis is required.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Summary of BDSP EIR Analysis

Toxic Air Contaminant and PM_{2.5} Risk

According to the BDSP EIR, future commercial or industrial projects within the BDSP planning area may locate new sources of toxic air contaminants (TAC) in proximity to existing or proposed sensitive receptors. Therefore, the level of risk associated with future projects in the BDSP planning area cannot be evaluated with certainty. The BDSP EIR determined that MMs AIR-4a and AIR-4b would reduce potential impacts to a less than significant level.

Asbestos from Demolition

According to the BDSP EIR, there is a high potential for asbestos-containing materials (ACM) to be present within the area due to the presence of structures that predate the federal prohibition of ACMs. Any demolition of existing buildings and structures would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), which is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether ACMs are potentially present. All ACM found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of ACMs. Therefore, projects that comply with BAAQMD Regulation 11, Rule 2 would ensure that ACMs would be removed and disposed of appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality.

Napa Cove Apartments Analysis

Toxic Air Contaminant and PM_{2.5} Risk

Implementation of the proposed project is anticipated and analyzed in the BDSP EIR. The proposed project is a residential development and would be required to implement BDSP EIR MM AIR-3 and MM AIR-4a to reduce potential impacts related to toxic air contaminant and PM_{2.5} emissions to a less than significant level.

Per MM AIR-4a, a Health Risk Analysis (HRA) was prepared for the project by Baseline Environmental Consulting in December 2021 (Appendix C). The HRA evaluates the potential health risk impacts associated with implementation of the project. The HRA concluded that health risk impacts from project operation would not exceed the BAAQMD's project-level health risk thresholds because the project would not introduce any new stationary sources of TACs (e.g., an emergency diesel generator). Operation of the project could expose future residents to TAC and PM_{2.5} emissions from cumulative sources (e.g., highway, major roadway, and railroads). The HRA estimated that the cancer risk and chronic Hazard Index at the project site resulting from cumulative sources would be 13 per million and less than 0.01, respectively. The cancer risk and chronic Hazard Index at the project site would be below the BAAQMD's cumulative screening level of 100 per million and 10, respectively. However, the PM_{2.5} concentrations at the project site resulting from the cumulative sources was estimated to be 1.0 micrograms per cubic meter which exceeds the BAAQMD's cumulative health risk screening level of 0.8 micrograms per cubic meter. The project would install air filtration devices with minimum efficiency reporting value (MERV) equal to or higher than 13 (MERV-13).⁵ The HRA estimated that with installation of MERV-13 air infiltration, the PM_{2.5} concentrations at the project site would be reduced to 0.15 micrograms per cubic meter which is less than the BAAQMD's cumulative health risk screening level. Therefore, the proposed project would not result in any new or more severe impacts related to TAC and PM_{2.5} emissions. No additional analysis is required.

Asbestos from Demolition

⁵ From: Michael LeBlanc, Emerald City Engineers, Inc. To: Choong Kim, AIA. Email Communication on November 23, 2021. Subject: Napa Cove Apartments – HRA Question.

The project site is currently undeveloped. Implementation of the project would not require demolition of existing structures. No impact related to ACM would occur.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would include the development of 1,200 net new dwelling units and 840,000 square feet of net new non-residential uses (commercial and office) by 2036. Buildout of the BDSP may include restaurants and/or food vendors. Although the BAAQMD does not list restaurants as a typical source of odor in their screening guidance or in the significance determination guidance, the BAAQMD's Guidance document does discuss potential mitigation measures to reduce the potential for odor impacts from food services. Restaurants can generate odor from cooking processes and waste disposal. The future restaurant tenants, if any, are currently unknown, as are the cooking methods, putrescible waste generation, and disposal methods.

The residential, general office, and shopping center land uses are not expected to produce any offensive odors that would result in odor complaints. During construction activities, diesel powered vehicles and equipment used on-site could create localized odors, but these would be temporary in nature and would dissipate. As such, construction-period and operation-period odor impacts were determined in the BDSP EIR to be less than significant.

Napa Cove Apartments Analysis

Implementation of the proposed project is anticipated and analyzed in the BDSP EIR. The proposed project is a residential development that is not expected to produce any offensive odors that would result in odor complaints. During construction, diesel powered vehicles and equipment used on-site would create localized odors, but these would be temporary and would dissipate quickly. Therefore, the proposed project would not result in any new or more severe impacts related to odors emissions beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM AIR-2

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

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

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or more as needed.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks shall be paved as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (beyond the 5-minute limit required by the California airborne

toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with a name and telephone number of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

BDSP EIR MM AIR-3

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

BDSP EIR MM AIR-4a

Prior to issuance of building permits for any sensitive receptor use (residential areas, elementary school, daycare centers, etc.) that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:

1. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed BAAQMD's cumulative risk threshold for toxic air contaminant impacts.
2. Prepare and submit a Health Risk Analysis to the City of American Canyon, consistent with BAAQMD's recommended methodology, that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the BAAQMD's cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified, and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to air quality. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required

3.2.4 Biological Resources

	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
<p>Would the project:</p> <p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p><i>Less than significant impact with mitigation</i></p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>MM BIO-1b</p>
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p><i>Less than significant impact with mitigation</i></p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>None</p>
<p>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?</p>	<p><i>Less than significant impact with mitigation</i></p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>None</p>

Would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
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 native wildlife nursery sites?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
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?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

A Biological Resources Technical Report has been prepared by WRA for the proposed Napa Cove Apartments in September 2021 (Appendix D).

Discussion

- 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 (CDFW) or United States Fish and Wildlife Service (USFWS)?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, several special-status plant and wildlife species occurrences have been recorded within 0.25 mile of the BDSP boundaries. BDSP EIR MM BIO-1a requires applicants proposing development activities on undeveloped properties to retain a qualified Biologist to prepare a reconnaissance-level biological assessment. BDSP EIR MM BIO-1b requires that pre-construction nesting bird surveys be conducted during the nesting season. With the implementation of BDSP EIR MM BIO-1a and MM BIO-1b, impacts to candidate, sensitive, or special status species would be less than significant.

Napa Cove Apartments Analysis

As discussed in the BDSP EIR, construction within the project site was anticipated and mitigation measures were identified to address potential impacts to biological resources. The project site is undeveloped and contains grasses, weedy vegetation and a few scattered trees. Special-status species are unlikely to nest within the project site. However, common birds protected by the Migratory Bird Treaty Act (MBTA) and/or Fish and Game Code may nest within trees or on the ground within the project site. Development of the proposed project has the potential to impact protected bird nests due to the removal of vegetation or indirectly harm birds through the generation of noise, light, and other disturbances that could result in the abandonment of eggs or young. Therefore, if work takes place during nesting season (February 1 and August 31), BDSP EIR MM BIO-1b would be implemented in order to avoid potential impacts to nesting birds. With the implementation of BDSP EIR MM BIO-1b, impacts to candidate, sensitive, or special status species during the construction of the proposed project would be less than significant.

Implementation of the project would result in similar conclusions with the incorporation of BDSP EIR MM BIO-1a and MM BIO-1b. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?*

Summary of BDSP EIR Analysis

Development activities that occur near American Canyon Creek, North Slough, and the smaller drainage features within the BDSP boundaries have the potential to impact sensitive natural communities and riparian habitat. Such activities may involve direct impacts to these features (e.g., to install a bridge or culvert) or indirect impacts to these features (e.g., disturbance within 10 feet of these features).

Accordingly, BDSP EIR MM BIO-2 requires applicants proposing development activities within properties that contain blue line drainage or wetland features to retain a qualified Biologist to conduct a jurisdictional assessment (or other applicable evaluation). If the assessment determines that the feature falls under the jurisdiction of a federal or state resource agency, the applicant shall obtain the requisite approvals and implement the appropriate mitigation measures. With the implementation of BDSP EIR MM BIO-2, impacts would be less than significant.

Napa Cove Apartments Analysis

No sensitive natural communities are located within the project site.⁶ Implementation of the project would have no impacts to sensitive natural communities. No additional analysis is required.

- 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?*

Summary of BDSP EIR Analysis

Development activities that occur near American Canyon Creek, North Slough, and the smaller drainage features within the BDSP boundaries have the potential to impact sensitive natural communities and

⁶ WRA, Inc. September 2021. Biological Resources Technical Report Napa Cove American Canyon Development.

riparian habitat. Such activities may involve direct impacts to these features (e.g., to install a bridge or culvert) or indirect impacts to these features (e.g., disturbance within 10 feet of these features).

Accordingly, BDSP EIR MM BIO-2 requires applicants proposing development activities within properties that contain blue line drainage or wetland features to retain a qualified Biologist to conduct a jurisdictional assessment (or other applicable evaluation). If the assessment determines that the feature falls under the jurisdiction of a federal or state resource agency, the applicant shall obtain the requisite approvals and implement the appropriate mitigation measures. With the implementation of BDSP EIR MM BIO-2, impacts would be less than significant.

Napa Cove Apartments Analysis

No aquatic resources are located within the project site.⁷ Implementation of the project would have no direct and indirect impacts to aquatic resources. No additional analysis is required.

- 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 native wildlife nursery sites?*

Summary of BDSP EIR Analysis

The BDSP area contains mostly urban, built-up land and is bisected by SR-29. Although there are undeveloped properties within the plan boundaries, they are disconnected and fragmented from each other and surrounded by urban development and infrastructure. Moreover, the presence of SR-29 serves as a formidable barrier to terrestrial wildlife movement within the BDSP area. To the extent that development and land use activities contemplated by the BDSP would involve disturbance to American Canyon Creek or North Slough, it would not impair localized wildlife movement by these species because of their adaptability to urban environments. Impacts would be less than significant.

Napa Cove Apartments Analysis

Large commercial development and SR-29 that are located immediately adjacent to the project site likely create a barrier for wildlife with limited crossing opportunities. While common wildlife species likely utilize the site to some degree for local movements, the project site is surrounded by large tracts of open space. As such, the loss of the project site as a migration corridor would result in less than significant impacts on a regional scale. Migratory birds may use the habitat within the project site opportunistically; however, higher quality habitat exists along the Napa River corridor. The marginal habitat within the project site offers only limited habitat for species along the Pacific Flyway. Based on these factors, the construction of the project would result in a less than significant impact to migratory corridors and habitat linkages. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

⁷ *Ibid.*

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Summary of BDSP EIR Analysis

American Canyon Municipal Code Chapter 19.24.040 sets forth restrictions on development and land use activities that affect riparian corridors. Generally, permitted uses must further the biological and hydrologic functions of the riparian corridor and be in the public interest (protect public health safety and welfare; provide public access, etc.). Additionally, any development activities that occur within riparian corridors must implement protective measures for fish, wildlife, vegetation, and water within in the drainage feature.

The only two riparian corridors within the BDSP area that could potentially be affected by development and land use activities are American Canyon Creek and North Slough. To the extent that development and land use activities contemplated by the BDSP would involve disturbance to American Canyon Creek or North Slough, they would be subject to the requirements of Chapter 19.24.040. Impacts would be less than significant.

Napa Cove Apartments Analysis

The proposed project would not impact watercourses, riparian habitat, vernal pools or wetlands. The proposed Project would remain consistent with the policies (applicable to all project components) and would therefore have no impact with regard to local plan and policy consistency. The project would be developed in consistent with the BDSP with incentive to reduce setback distance from 35 feet to 30 feet 4 inches between building faces. The project may require removal of trees including coast live oak, Fremont cottonwood and other non-native trees (cherry and palm). In accordance with the City's Tree Ordinance, any tree removed would be replaced on the site, as approved by the City Council. Impacts would be less than significant. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

- 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?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP area is not within the boundaries of an adopted habitat conservation plan or natural community conservation plan. This condition precludes the possibility of the BDSP conflicting with the provisions of such a plan. No impacts would occur.

Napa Cove Apartments Analysis

The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No such plan exists applicable to the project site. No impact will occur. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM BIO-1b

Prior to tree removal activities that occur during the nesting season (February 1 and August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than

14 days prior to vegetation removal. If the biologist observes nesting birds to be present, a minimum 250-foot protective buffer shall be established around the nest until the young have fledged. This mitigation measure shall not apply to tree removal activities that occur outside the nesting season (September 1 to January 31).

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to biological resources. The conclusions from the BDSP EIR remain unchanged when considering adoption of the Addendum. No additional analysis is required.

3.2.5 Cultural Resources

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<i>Less than significant impact with mitigation</i>	No	No	No	MM CUL-1
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<i>Less than significant impact with mitigation</i>	No	No	No	MM CUL-1
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<i>Less than significant impact with mitigation</i>	No	No	No	MM CUL-4

A cultural resources study for the Napa Cove Apartments Project was completed by Tom Origer & Associated on September 9, 2021 (Appendix E). No historic properties were identified, and no archaeological site indicators were found within the Area of Potential Effects during the cultural resources study. The cultural resources study provided recommendations to handle accidental discovery of buried materials, which are consistent with the BDSP EIR MM CUL-1 and MM CUL-4 discussed below.

Discussion

- a) *Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, 12 historic structures (i.e., more than 45 years old) located within the BDSP and nine historic structures located within a 0.5-mile radius of the BDSP area. The 12 resources located within the BDSP area include three historic sites (foundations and privies), one farm/ranch, six residential homes, and two commercial buildings that were recorded between 1977 and 2015. These structures were evaluated for listing in the California Register of Historical Resources and National Register of Historic Places and were determined not to be eligible for listing. Therefore, these resources do not meet the definition of a “historical resource” for the purposes of CEQA. Although there are no listed historic resources within the BDSP area, it is possible that subsurface excavations may encounter previously undiscovered historic resources during development activities. The implementation of standard cultural resource construction mitigation (MM CUL-1) would ensure that this impact is less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Consistent with the BDSP EIR, while there are no historical resources within the project site, it is possible that subsurface excavations during construction would encounter previously undiscovered historic resources. The implementation of standard cultural resources construction mitigation (BDSP EIR MM CUL-1) would ensure that this impact is less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, no known prehistoric archaeological resources have been recorded within the BDSP area. However, it is possible that subsurface excavations may encounter previously undiscovered archaeological resources within the BDSP and the off-site development areas. The implementation of standard cultural resource construction mitigation (MM CUL-1) would ensure that this impact is less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Consistent with the BDSP EIR, while there are no prehistoric archaeological resources recorded within the project site, it is possible that subsurface excavations during construction would encounter previously undiscovered archaeological resources. The implementation of standard cultural resources construction mitigation (BDSP EIR MM CUL-1) would ensure that this impact is less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

- c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

Summary of BDSP EIR Analysis

The BDSP area includes areas previously inhabited by Native American tribes and, thus, there is always the possibility that subsurface construction activities associated with buildout of the BDSP, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. However, if human remains are discovered, implementation of MM CUL-4 would reduce this potential impact to a less than significant level.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Consistent with the BDSP EIR, it is possible that subsurface excavations during construction would encounter previously undiscovered human remains. The implementation of standard cultural resources construction mitigation (BDSP EIR MM CUL-4) would ensure that this impact is less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM CUL-1

If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities associated with new development that occurs pursuant to the Specific Plan, all construction activities within 100 feet of the find shall halt and the City of American Canyon shall be notified. Prehistoric

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

BDSP EIR MM CUL-4

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

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to cultural resources. The conclusions from the BDSP EIR remain unchanged when considering adoption of the Addendum. No additional analysis is required.

3.2.6 Energy

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	None	No	No	No	None
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	None	No	No	No	None

Discussion

a) and b) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Summary of BDSP EIR Analysis

These checklist questions were not analyzed in the BDSP EIR. The BDSP EIR did not separately analyze the energy consumption resulting from the buildout of the BDSP; however, it was addressed in several relevant topical areas of the EIR. As discussed in Section 3.2, Air Quality and Greenhouse Gases, and Section 6, Other CEQA Considerations, of the BDSP EIR, buildout of the BDSP planning area would result in the consumption of electricity, natural gas, and transportation fuels during construction and operational activities. The BDSP EIR ultimately determined that buildout of the BDSP would be consistent with the City’s Sustainability Best Practice Activities,⁸ which largely encompasses energy efficiency measures through the reduction of fossil fuel consumption such as promoting infill development, alternative modes of transportation, and higher density development.

In particular, according to the energy efficiency and conservation activities goals identified within the Sustainability Best Practices Activities, the City of American Canyon joined MCE in November of 2015. MCE provides renewable energy without replacing PG&E’s infrastructure, maintenance, or billing systems. On September 1, 2016, the entire City of American Canyon was automatically enrolled in the light green program; at which time, users began utilizing a minimum of 52 percent renewable energy. In addition, the MCE Deep Green Program was also provided as an option to customers, allowing for 100 percent renewable energy consumption.⁹

⁸ City of American Canyon. 2019. City of American Canyon Sustainability Best Practices. Accessed September 20, 2021.

⁹ *Ibid.*

Napa Cove Apartments Analysis

The proposed project would be a residential project proposed on land designated and zoned for residential uses. There would be increases in both short- and long-term energy demands. Short-term energy demand would result from construction activities, including energy needed to power worker and vendor vehicle trips as well as construction equipment. Long-term energy demand would result from operation of the project, which would include activities such as lighting, heating, and cooling of structures. Although implementation of the proposed project would result in an increase in energy usage compared to existing conditions, the increase in energy use would not be wasteful or inefficient because of measures incorporated into project design, including energy-efficient building design meeting CALGreen requirements.

In addition, the project would be required to comply with Title 24, Part 6 of the California Code of Regulations, Building Energy Efficiency Standards. The proposed project is not located in an identified area designed for renewable energy production nor would the project interfere with the installation of any renewable energy systems. Therefore, the proposed project would not conflict with or obstruct with applicable State or local plans for promoting use of renewable energy and energy efficiency and have not significant energy impacts. Therefore, the proposed project would not result in any new or more severe building operation energy impacts beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

There is no new information identifying new significant effects, nor is there any increase in the severity of previously identified impacts in the BDSP EIR related to energy. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

3.2.7 Geology and Soils

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
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?	<i>Less than significant impact with mitigation</i>	No	No	No	MM GEO-1a
ii) Strong seismic ground shaking?	<i>Less than significant impact with mitigation</i>	No	No	No	MM GEO-1b
iii) Seismic-related ground failure, including liquefaction?	<i>Less than significant impact</i>	No	No	No	None
iv) Landslides?	<i>Less than significant impact</i>	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	<i>Less than significant impact with mitigation</i>	No	No	No	MM HYD-1a
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<i>Less than significant impact</i>	No	No	No	None
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	<i>Less than significant impact with mitigation</i>	No	No	No	MM GEO-1b

Would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
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?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<i>Less than significant impact with mitigation</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM CUL-3</i>

Discussion

a-i) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the West Napa Fault is located within the BDSP planning area and that future development activities that occur pursuant to the BDSP within an Alquist-Priolo Special Study Zone would require the preparation of a fault investigation to determine the precise location of the West Napa Fault and establish appropriate setbacks for new structures. This requirement was reflected in MM GEO-1a. The BDSP EIR concluded that buildout of the BDSP may expose people or structures to potential substantial adverse effects associated with seismic hazards.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. The proposed project would not result in any change to the analysis or conclusions in the BDSP EIR. An Earthquake Fault Investigation Report was prepared for the Napa Cove Apartments Project by Ryan Geological Consulting, Inc. on September 23, 2021 (Appendix F) according to BDSP EIR MM GEO-1a. The Earthquake Fault Investigation identified that the West Napa Fault is located in the open field immediately west of the project site and recommended that a 50-foot fault setback for new structures intended for human occupancy. The proposed project will comply with the recommended setbacks and protective measures identified in the Earthquake Fault Investigation Report. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with fault rupture than those previously analyzed in the BDSP EIR. No additional analysis is required.

- a-ii) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the areas within the BDSP could be subject to “strong” and “very strong” ground shaking, and that future development activities that occur pursuant to the BDSP would be required to prepare a design-level geotechnical report at the time building permits are sought. Such a report would provide recommendations on the appropriate level of soil engineering and building design necessary to minimize ground-shaking hazards. This requirement was reflected in MM GEO-1b. The BDSP EIR concluded that implementation of MM GEO-1b would ensure that development consistent with the BDSP is not exposed to strong ground shaking hazards, and that impacts would be less than significant with mitigation incorporated.

Napa Cove Apartments Analysis

The BDSP EIR analyzed development on the project site. The proposed project would adhere to the applicable geology and soils mitigation measures identified in the BDSP EIR. Consistent with BDSP EIR MM GEO-1b, a Geotechnical Engineering Investigation Report was prepared for the proposed project by Krazan & Associates, Inc. on September 27, 2011 (Appendix G). The Geotechnical Engineering Investigation Report has been submitted to the City for review. The Geotechnical Engineering Investigation Report identified clayey sand, sandy silty clay, and loose soils on-site, and provided recommendations for site preparation, including recompacting surface soils, proper removal of any buried structures, extended excavations, and refilling with non-expansive or lime-treated engineered fill. Complying with recommendations in the Geotechnical Engineering Investigation Report would ensure that the proposed project is not exposed to strong ground shaking hazards. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with ground shaking than those previously analyzed in the BDSP EIR. No additional analysis is required.

- a-iii) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that the BDSP area is underlain by sandstone bedrock, relatively strong and incompressible alluvial subsoils, and a topsoil layer of clayey soils. These characteristics indicate that development consistent with the BDSP would not be susceptible to ground failure, liquefaction, or liquefaction-related phenomena. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

As analyzed in the BDSP EIR, the BDSP planning area is underlain by sandstone bedrock, relatively strong and incompressible alluvial subsoils, and a topsoil layer of clayey soils. These characteristics indicate that implementation of the BDSP would not be susceptible to ground failure, liquefaction, or liquefaction-related phenomena. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with ground failure than those previously analyzed in the BDSP EIR. No additional analysis is required.

- a-iv) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that the BDSP area contains mostly flat relief and that most, if not all, of the properties with the Specific Plan boundaries either support urban development or have been rough graded, which makes the likelihood of landsliding very low. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The project site is located in a relatively flat, developed area and is not located on or near significant slopes. The risk landslides would be consistent with what was analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with landslides than those previously analyzed in the BDSP EIR. No additional analysis is required.

- b) *Result in substantial soil erosion or the loss of topsoil?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, development activities that occur pursuant to the BDSP would involve grading, building construction, paving, and utility installation activities that could result in erosion and sedimentation. Left unabated, the accumulation of sediment in downstream waterways could result in the blockage of flows, potentially causing increased localized ponding or flooding. As such, MM HYD-1a would require the implementation of stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. The BDSP EIR concluded that implementation of MM HYD-1a would reduce impacts to less than significant.

Napa Cove Apartments Analysis

As discussed in Section 3.2.9, Hydrology and Water Quality, the proposed project would include implementation of stormwater quality control measures consistent with BDSP EIR MM HYD-1a and would not result in greater impacts than what was analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new environmental impacts related to soil erosion or loss of topsoil or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- c) *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?*

Summary of BDSP EIR Analysis

The BDSP EIR concluded that development within the BDSP area would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of development consistent with the BDSP, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse because the Geotechnical Investigation prepared for the BDSP EIR determined that the soils on the BDSP area are suitable to support urban development, provided that standard grading and soil engineering practices are implemented. It was concluded in the BDSP EIR that the development within the BDSP area would not be susceptible to or cause landslides, lateral spreading, subsidence, collapse, ground failure, liquefaction, or liquefaction-related phenomena, and that impacts would be less than significant.

Napa Cove Apartments Analysis

According to the BDSP EIR, development within the BSDP area would not be located on a geologic unit or soil that is unstable and would not be susceptible to or cause landslides, lateral spreading, subsidence, collapse, ground failure, liquefaction, or liquefaction-related phenomena. The BDSP EIR analyzed development on the project site. The proposed project would not result in any change to the analysis or conclusions in the BDSP EIR. As such, the proposed project would not result in any impacts beyond what was analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new environmental impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- d) *Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?*

Summary of BDSP EIR Analysis

It was concluded in the BDSP EIR that the BDSP area would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property, but that MM GEO-1b, which requires the preparation of a design-level geotechnical study that complies with the applicable requirements of the latest adopted edition of the California Building Standards Code to identify grading and soil engineering practices, would ensure that expansive soil conditions are abated. With the implementation of MM GEO-1b, impacts would be less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. The proposed project would not result in any change to the analysis or conclusions in the BDSP EIR. As discussed in Impact a-ii) above, a Geotechnical Engineering Investigation Report was prepared for the project. The Geotechnical Engineering Investigation Report identified clayey sand, sandy silty clay, and loose soils on-site. These soils are disturbed, have low strength characteristics and are highly compressible when saturated. Accordingly, it is recommended to recompact the surface soils to stabilize and locate any unsuitable or pliant areas on-site. The proposed project will comply with BDSP EIR MM GEO-1b and implement recommendations identified on the Geotechnical Engineering Investigation Report. In addition, the proposed project would be required to comply with the California Building Standards Code to implement appropriate grading and soil engineering practices to abate the expansive soil conditions on-site. Consistent with the BDSP EIR, implementation of the recommendations on the Geotechnical Investigation Report and comply with the California Building Standards Code would reduce impacts associated with expansive soils. Therefore, the proposed project would not introduce new environmental impacts related to expansive soil or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- 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?*

Summary of BDSP EIR Analysis

New development that occurs pursuant to the BDSP would be served by sanitary sewer service provided by the City of American Canyon. No septic systems or wastewater disposal systems would be used. No impacts would occur.

Napa Cove Apartments Analysis

Consistent with the BDSP EIR, the development of the proposed project would not use septic tank systems or other alternative wastewater disposal systems. No new impacts associated with septic tank systems or alternative wastewater disposal would occur. Therefore, the proposed project would not introduce new environmental impacts related to septic tank or alternative wastewater disposal systems or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Summary of BDSP EIR Analysis

The paleontological records search commissioned through the University of California Berkeley Museum of Paleontology indicate that there are no vertebrate fossil localities that have been previously recorded within the BDSP boundaries. However, there has been one fossil locality that is located within a 0.5-mile radius of the BDSP area. The one fossil locality (D8020) was located east of Oat Hill and has been identified as Paleocene invertebrates from the Purisima Formation. The implementation of MM CUL-3 would reduce this potential impact to a less than significant level.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Development of the proposed project would not result in more intense or extensive construction activity than those analyzed in the BDSP EIR. Accordingly, the proposed project would not result in any change to the analysis or conclusions in the BDSP EIR. The implementation of BDSP EIR MM CUL-3 would be required for the proposed project to mitigate any potential impact to paleontological resources. Therefore, the proposed project would not introduce new environmental impacts related to paleontological resources or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM CUL-3

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

BDSP EIR MM GEO-1a

Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan that are located within an Alquist-Priolo Special Study Zone, the City of American Canyon shall verify that the applicant has commissioned a fault investigation. The fault investigation shall be prepared by a licensed geologist or geotechnical engineer and determine the precise location of the West Napa Fault in

relation to the proposed project. All recommended fault setbacks set forth in the fault investigation shall be shown on project plans.

BDSP EIR MM GEO-1b

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

BDSP EIR MM HYD-1a

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

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts related to geology and soils. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

3.2.8 Greenhouse Gas Emissions

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<i>Less than significant impact</i>	No	No	No	None
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<i>Less than significant impact</i>	No	No	No	None

Discussion

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Summary of BDSP EIR Analysis

It was concluded in the BDSP EIR that development and land use activities contemplated by the BDSP would generate direct and indirect greenhouse gas (GHG) emissions; however, these emissions would not result in a significant impact on the environment.

Construction

The BAAQMD does not presently provide a construction-related GHG significance threshold but recommends that construction-generated GHGs be quantified and disclosed. The BAAQMD also recommends that lead agencies (in this case, the City of American Canyon) determine the level of significance of construction GHG emissions in relation to meeting AB 32 GHG reduction goals. As discussed in the BDSP EIR, buildout of the BDSP EIR would emit GHGs from upstream emission sources and direct sources. However, the BAAQMD does not have a recommended assessment methodology or threshold for plan-level, construction-generated GHGs. Upstream emissions were not estimated because they were not within the control of the project and to do so would have been speculative.

Operation

The BDSP EIR calculated operational GHG emissions with CalEEMod, Version 2016.3.2 using the trip generation estimates provided in the Traffic Impact Analysis and compared them to the BAAQMD's 4.6 metric tons (MT) of carbon dioxide equivalent (CO₂e) per service population per year for project-level GHG emissions. The full buildout of the BDSP is expected in 2036. Because 2036 is not offered as an operational year in CalEEMod Version 2016.3.2, emissions were estimated in 2035. Operation after full buildout in 2035 was estimated to generate approximately 23,153 MT CO₂e per year. The operational emissions were less than the BAAQMD's applicable GHG emissions threshold. The BDSP's GHG impact was determined to be less than significant.

Napa Cove Apartments Analysis

Development of the proposed project would generate GHG emissions during short-term construction activities, such as site preparation, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from site, and construction worker vehicle trips similar to the construction activities analyzed in the BDSP EIR. Long-term operational GHG emissions that would result from the proposed project would include generated vehicular traffic, operation of any landscaping equipment, off-site generation of electrical power over the life of the project, the energy required to convey water to and wastewater from site, and emissions associated with the hauling and disposal of solid waste. The proposed project construction and operational GHG emissions are considered and analyzed in the BDSP EIR. As a result, the proposed project similar to the BDSP EIR would not directly or indirectly generate GHG emissions that may a significant impact to the environment. Therefore, the proposed project would not result in any new or more severe impacts related to GHG emissions beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Summary of BDSP EIR Analysis

The BDSP EIR concluded that development and land use activities contemplated by the Specific Plan would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHGs. The BDSP EIR states that the program and policy recommendations contained in the City of American Canyon Energy Efficiency Climate Action Plan (EECAP) were reviewed to determine if development of the project would conflict with any of the recommendations. The EECAP outlines a course of action to reduce community-wide GHG emissions generated within the City of American Canyon.

The American Canyon General Plan Circulation Element contemplates mobility improvements that would promote the development of mobility enhancements are intended to improve both motorized and non-motorized circulation within the Broadway District. Consistent with these objectives, the BDSP's design encourages development that results in reduced GHG emissions.

If a project is less than BAAQMD's threshold of significance for GHGs, it stands to reason that the project would not substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. As described in question a), buildout of the BDSP would not exceed BAAQMD's threshold of significance for GHG emissions and would result in a less than significant impact. Therefore, the BDSP would not substantially conflict with the emission reduction requirements by AB 32.

The BDSP was found to be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing emissions of greenhouse gases, including the City's EECAP. As a result, it was determined that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the proposed project would be consistent with the BDSP development standards and design guidelines with incentive to reduce setback distance between building faces. The proposed project is considered and analyzed in the BDSP EIR GHG analysis, as such that the proposed project would comply with any applicable plan, policy and regulation of an agency adopted to reduce the emissions of GHGs, including the City of American Canyon EECAP, General Plan Circulation Element, BAAQMD's threshold of significance for GHGs. Therefore, the proposed project would not result in any new or more severe impacts related to conflict with applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to GHG emissions. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

3.2.9 Hazardous and Hazardous Materials

Would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
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?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
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?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

a) and b) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 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?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that buildout of the BDSP would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. According to the BDSP EIR, hazardous materials such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents could be present during construction activities. Additionally, cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids and oil would be present on-site as part of daily operations.

The BDSP boundaries contain numerous structures that predate the federal prohibition of ACMs. Thus, it was determined that there is a high potential for ACMs to be present within the BDSP area.

Additionally, it was determined that the buildout of the BDSP would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Land uses that handle large quantities of hazardous materials are generally agricultural, industrial, or resource extraction in nature. These types of land uses were not contemplated by the BDSP. These materials would not be considered a potential risk to human health or the environment and that releases that could potentially expose substantial numbers of people or the environment to harm is not anticipated by any of the BDSP land uses. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Consistent with the BDSP EIR, development of the proposed project would utilize hazardous materials such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents during construction activities. Development of the project site would occur within the area analyzed in the BDSP EIR, would use the same hazardous materials, and would subject to similar conditions with respect to hazards and hazardous materials as what was analyzed in the BDSP EIR. Therefore, the proposed project would not result in new or substantially greater significant impact with regard to hazards and hazardous materials. Construction of the project would result in similar conclusions related to hazards and hazardous materials. Therefore, the proposed project would not introduce new environmental impacts through the routine transport, use, or disposal of hazardous materials or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that buildout of the BDSP would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. According to the BDSP EIR, Napa Junction Elementary School is located within the BDSP boundaries and is within the "Business Park" subarea. Additionally, Canyon Oaks Elementary School, Donaldson Way Elementary School, and American Canyon High School are within 0.35 mile, 0.40 mile, and 0.65 mile of the BDSP boundaries, respectively. During preparation of the BDSP EIR, Napa Valley Unified

School District was in the process of finding a new location for Napa Junction Elementary School. The BDSP EIR determined that because land uses that emit hazardous emissions or handle hazardous materials, such as agricultural, industrial, or resource extraction are not contemplated by the BDSP, buildout of the BDSP would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The project site is not located within 0.25 mile of a school. The nearest schools are Donaldson Way Elementary School and Napa Valley Montessori Learning Center located approximately 0.56 mile southwest and south of the project site, respectively. Consistent with the BDSP EIR, construction of the proposed project would not create land uses that emit hazardous emissions or handle hazardous materials, such as agricultural, industrial, or resource extraction. This precludes the possibility that the proposed project would result in the emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to hazardous emissions or materials within 0.25 mile of a school than those previously analyzed in the BDSP EIR. No additional analysis is required.

- d) *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?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. According to the BDSP EIR, there are eight (8) recorded sites within the BDSP boundaries that are listed on hazardous materials databases compiled pursuant to Government Code Section 65962.5. All of the sites are associated with leaking underground storage tanks (USTs). At the time of BDSP EIR preparation, seven of the sites were listed as “Closed,” signifying that they have been remediated to the satisfaction of the agency with oversight. The lone site listed as “Open” was located at Caltrans Route 29 Post-Mile 1.13 (3466 Broadway Street); this site is listed as closed¹⁰ Therefore, the BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

A Phase I Environmental Site Assessment (ESA) was prepared for the project site by Partner Engineering and Science, Inc. on July 1, 2021 (Appendix H). The Phase I ESA indicated that a 550-gallon former UST is located within the project site. A Phase II ESA investigation was prepared in December 2021 by AEI Consultants (Appendix I) to evaluate whether the former UST is present at the project site and whether the project site has been significantly impacted by the release from the former UST. The Phase II investigation results were compared to the residential Environmental Screening Levels (ESLs) and indicated that two (2) out of six (6) gas samples yielded concentrations of benzene exceed the residential ESL. However, the two (2) locations where concentrations of benzene exceed the residential ESL would be developed into surface parking area not residential buildings. In addition, two (2) gas samples collected

¹⁰ State Water Resources Control Board. GeoTracker. Website: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento>. Accessed September 21, 2021.

in the vicinity of the nearest proposed residential building yielded benzene concentration below the residential ESL. The Phase II ESA concluded that a former UST cavity was identified, but no UST was located. The former UST does not appear to have resulted in significant contamination at the project. The BDSP EIR anticipated development of the project site. Implementation of the proposed project would not result in any change to the analysis or conclusions in the BDSP EIR regarding hazardous sites. The impact would be less than significant. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to hazardous materials sites than those previously analyzed in the BDSP EIR. No additional analysis is required.

- e) *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?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that for a future development located within an airport land use plan or, where such a plan has not been adopted, within 2.0 miles of a public airport or public use airport, the future development would not result in a safety hazard for people residing or working the project area. The BDSP determined that the northern portion of the BDSP area is within 2.0 miles of Napa County Airport, but that buildout of the BDSP would not result in safety hazards for persons residing or working in the BDSP vicinity. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The project site is approximately 3.0 miles south of Napa County Airport. According to the Airport Land Use Compatibility Plan, the project site is not located within the boundaries of the airport influence area.¹¹ Because the site is not located 2.0 miles of a public or public use airport, and because the site is not in an airport influence area, the proposed project would not result in safety hazards or excessive noise beyond those analyzed in the BDSP EIR. Additionally, there are no private airstrips in the vicinity of the project site. Therefore, the proposed project would not have any impacts related to a private airstrip and would not create any hazard for people in the area. Therefore, the proposed project would not introduce new environmental impacts related to a public or public use airport or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. According to the BDSP EIR, the BDSP included several mobility enhancements and new connections that improve mobility within the subareas, and by extension, emergency response and evacuation. The BDSP EIR determined that other improvements, such as trail connections, would have no impact on emergency access or evacuation. The BDSP EIR concluded that development consistent with the Specific Plan would not impair emergency response or evacuation in the BDSP vicinity and that impacts would be less than significant.

¹¹ Napa County. 1999. Napa County Airport Land Use Commission Airport Land Use Compatibility Plan, Figure 3A, Compatibility Plan. Website: <https://www.countyofnapa.org/DocumentCenter/View/1980/Airport-Land-Use-Compatibility-Plan-PDF>. Accessed September 21, 2021.

Napa Cove Apartments Analysis

The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would comply with the California Fire Code requirements for emergency access. The proposed project would not include changes that could potentially interfere with an emergency response plan or an emergency evacuation plan. Furthermore, the City traffic engineer would review and approve the site plan prior to approval. Therefore, the proposed project would not introduce new environmental impacts related to an adopted emergency response plan or emergency evacuation plan or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries are surrounded by urban uses and infrastructure on three sides and undeveloped land on the fourth. These characteristics preclude the possibility of the BDSP boundaries being exposed to wildland fires. It was determined that no impacts would occur.

Napa Cove Apartments Analysis

The project site is not in a High Fire Hazard Severity Zone or in a Very High Fire Hazard Severity Zone as mapped by California Department of Forestry and Fire Protection (CAL FIRE), and the project site is not located in a State Responsibility Area.¹² The project site is urbanized and is not adjacent to wildland areas. As such, the proposed project would not directly or indirectly expose people or structures to a significant risk of loss, injury or death involving wildland fires. Therefore, the proposed project would not introduce new environmental impacts related to wildland fires or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

¹² CAL FIRE. *Fire Hazards Severity Zone Viewer*. Website: <https://egis.fire.ca.gov/FHSZ/>. Accessed September 21, 2021.

3.2.10 Hydrology and Water Quality

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<i>Less than significant impact with mitigation</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM HYD-1a, MM HYD-1b</i>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
c) Substantially alter the existing drainage pattern of the site or 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;	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site;	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
iii) create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
iv) impede or redirect flood flows?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<i>No impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	None	No	No	No	None

Discussion

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that construction and operational activities associated with the BDSP have the potential to degrade water quality in downstream water bodies. According to the BDSP EIR, buildout of the Specific Plan has the potential to degrade water quality arising from (1) short-term land disturbance from construction activities and presence of contaminants associated with construction machinery, and (2) long-term changes to land use and drainage patterns that may increase the delivery of sediments, nutrients, organic compounds, trash/debris, and other contaminants to waterways tributary to the Napa River. MM HYD-1a and MM HYD-1b were proposed, which would require implementation of a Stormwater Control Plan and an operation and maintenance program to ensure stormwater controls. The BDSP EIR concluded that impacts would be less than significant with the implementation of MM HYD-1a and MM HYD-1b.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. The proposed project would not result in more intense or extensive construction or operational activity that has the potential to degrade water quality in downstream water bodies than the projected development analyzed in the BDSP EIR. Accordingly, the proposed project would not result in any change to the analysis or conclusions in the BDSP EIR. Additionally, the proposed project would be required to implement BDSP EIR MM HYD-1a and MM HYD-1b to address stormwater impacts. A Preliminary Stormwater Control Plan per MM HYD-1b was prepared for the project by Carlson, Barbee & Gibson, Inc. on September 22, 2021 (Appendix J). The Preliminary Stormwater Control Plan identified opportunities and constraints for stormwater control during project operation. The Preliminary Stormwater Control Plan also described the preliminary design of stormwater treatment facilities and stormwater pollution control measures in accordance with the current edition of the Bay Area Stormwater Management Agencies’ Post Construction Manual. The project will implement the design of the stormwater treatment facilities and stormwater pollution control measures as described in the Preliminary Stormwater Control Plan. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with water quality than those previously analyzed in the BDSP EIR. No additional analysis is required.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not contribute to groundwater overdraft because the BDSP area would be served by potable water service provided by the City of American Canyon, and no groundwater wells would be drilled on-site. Additionally, the BDSP EIR determined that buildout of the BDSP would not impair groundwater recharge because soils that underlie the BDSP area are mostly clay, which have a very low infiltration rate—particularly when thoroughly wetted—and thus offer marginal groundwater recharge qualities. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Consistent with the discussion and analysis in the BDSP EIR, the proposed project would be served by the existing potable water service provided by the City of American Canyon. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with groundwater supplies or groundwater recharge than those previously analyzed in the BDSP EIR. No additional analysis is required.

- c) *Substantially alter the existing drainage pattern of the site or 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 that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that the development consistent with the BDSP would not contribute runoff to downstream storm drainage facilities that would result in the potential for flooding, erosion or siltation, or create runoff water which would exceed the capacity of existing or planned stormwater drainage systems. According to the BDSP EIR, buildout of the BDSP would increase the impervious surface of the BDSP area, but compliance with the City’s post-development stormwater requirements would ensure that that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities such that flooding occurs.

Pursuant to the requirements of the applicable stormwater permits, the City of American Canyon requires new development to address post-development stormwater quality using treatment measures—Low Impact Development (LID) concepts. Common examples of LID concepts include bioretention basins, landscaping, and designing pervious areas to drain into landscaped areas. LID serves two purposes: treating runoff and reducing the release of runoff during peak events.

When applications for new development are filed with the City of American Canyon, City staff will review project plans for compliance with the City’s post-development stormwater requirements. This would ensure that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the proposed project would comply with the City's post-development stormwater requirements. The proposed project will implement the Preliminary Stormwater Control Plan and an operation and maintenance program as required by BDSP EIR MM HYD-1b and discussed in Impact a) above. In addition, a Preliminary Hydrology Analysis was prepared for the project by Carlson, Barbee & Gibson, Inc. on September 24, 2021 (Appendix K). The Preliminary Hydrology Analysis indicated that the project will not create any adverse effects on the storm drain system downstream of the project. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with drainage, drainage systems, runoff, erosion, siltation, or flood flows than those previously analyzed in the BDSP EIR. No additional analysis is required.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, there are no inland water bodies that could be potentially susceptible to a seiche in the BDSP vicinity. This precludes the possibility of a seiche inundating the BDSP area.

The Association of Bay Area Government's interactive tsunami mapping feature indicates that only the coastal portions of Sonoma, Marin, San Francisco, and San Mateo Counties are susceptible to tsunamis. Areas located near the bay are not considered susceptible to tsunami inundation. This condition precludes the possibility of a tsunami inundating the BDSP area.

There are no steep slopes that would be susceptible to a mudflow in the BDSP vicinity, nor are there any volcanically active features that could produce a mudflow in the City of American Canyon. This precludes the possibility of a mudflow inundating the BDSP area. No impacts would occur.

Napa Cove Apartments Analysis

The project site is not located within the Southern Gateway Subarea where the flood hazards areas occur in the BDSP planning area. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with flood hazard areas than those previously analyzed in the BDSP EIR.

As stated in the BDSP EIR, only the coastal portions of Sonoma, Marin, San Francisco, and San Mateo Counties are susceptible to tsunamis, and areas located near the bay are not considered susceptible to tsunami inundation. Additionally, the project site is not near any steep slopes. Thus, the proposed project would not be at risk of inundation by seiche, tsunami, or flooding. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with seiche, tsunami, or flooding than those previously analyzed in the BDSP EIR. No additional analysis is required.

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Summary of BDSP EIR Analysis

This question was not included in the BDSP EIR. No conclusion was made regarding the significance level of impacts related to compliance with a water quality control plan or sustainable groundwater management plan.

Napa Cove Apartments Analysis

Development of the proposed project would comply with the requirements of the San Francisco Bay Regional Water Quality Control Board and would satisfy the requirements of the National Pollutant

Discharge Elimination System (NPDES) Program. The proposed project would not conflict with the guiding and implementing policies of the General Plan related to hydrology and water quality, including Goal 10, Objective 10.1, and Policies 10.1.1 through 10.1.13. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM HYD-1a

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

BDSP EIR MM HYD-1b

Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the project applicant shall prepare a Stormwater Control Plan that includes post-construction stormwater controls in the site design to satisfy requirements of the Phase II Small MS4 Permit. This shall include a review of the final Stormwater Control Plan by the City of American Canyon to ensure that the required controls are in place. Provision E.12.h of the MS4 Permit requires that an operation and maintenance program be implemented for post-construction stormwater management features. Responsible parties and funding for long-term maintenance of all BMPs must be specified. This plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.

Conclusion

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

3.2.11 Land Use and Planning

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Physically divide an established community?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
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?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

a) *Physically divide an established community?*

Summary of BDSP EIR Analysis

The BDSP EIR concluded that all development displaced by the BDSP building would occur on a voluntary basis and that occupants would be given advance notice of development plans. The BDSP includes mobility enhancements to improve both motorized and non-motorized circulation, which would improve Broadway District connectivity. Therefore, impacts were determined to be less than significant.

Napa Cove Apartments Analysis

The proposed project is zoned as Broadway Residential. Development of affordable housing on the project site would be consistent with the zoning designation. Additionally, the proposed project does not include the addition of new roadways which could divide an established community. The project applicant is requesting incentives to reduce parking spaces required by American Canyon Municipal Code Section 19.21.030, to reduce setback distance between building faces required by BDSP development standards, and to reduce minimum depths for balconies and patios required by BDP development standards. These incentives would not create a division in the community. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) *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?*

Summary of BDSP EIR Analysis

The BDSP evaluated consistency of the BDSP with applicable policies and land use designations with the General Plan. The BDSP required a General Plan Amendment to ensure consistency between the BDSP and the American Canyon General Plan. When a Specific Plan entails amendments to the General Plan designations or zoning, inconsistency with the existing designations or zoning is an element of the project itself, which then necessitates a legislative policy decision by the agency and does not signify a potential environmental effect. As such, the proposed General Plan Amendment served as a self-mitigating aspect of the BDSP that served to correct the conflict. The BDSP EIR concluded that the BDSP was consistent with

all applicable goals, objectives, and policies in the General Plan. Therefore, impacts were determined to be less than significant.

Napa Cove Apartments Analysis

As described in Section 2.4 and Impact a) above, the proposed project would request incentives to reduce parking spaces, minimum building faces setback requirement, and minimum balconies and patios depth requirements. Once the incentives requests are granted by approved by the Planning Commission or City Council, the proposed project would not conflict with any land use plan or policy. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No Additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.12 Mineral Resources

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No impact	No	No	No	None
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No impact	No	No	No	None

Discussion

a) and b) 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? 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?

Summary of BDSP EIR Analysis

The BDSP EIR concluded that the BDSP boundaries do not contain a known mineral deposit and the land does not support mineral extraction operations. This precludes the possibility of a loss of mineral resources of local, regional, or statewide importance. It was determined that no impact would occur.

Napa Cove Apartments Analysis

As stated in the BDSP EIR, the BDSP boundaries do not contain a known mineral deposit and the Broadway Residential Subarea does not currently support mineral extraction operation. No site within the BDSP boundaries is designated by the State or the City of American Canyon as a location of known mineral deposit. Therefore, the proposed project would not result in the loss of known mineral resources or deposit sites, nor is there high potential for mineral resources to be identified in the undeveloped area. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No Additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.13 Noise

Would the project result in:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<i>Less than significant impact with mitigation</i>	No	No	No	MM NOI-1
b) Generation of excessive groundborne vibration or groundborne noise levels?	<i>Less than significant impact with mitigation</i>	No	No	No	MM NOI-2a
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?	<i>Less than significant impact</i>	No	No	No	None

Discussion

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Summary of BDSP EIR Analysis

The noise analysis of the BDSP EIR concluded that potential exposure of persons to excessive noise could occur with buildout of the BDSP. However, MM NOI-1 would require a detailed acoustical analysis to be prepared for any noise sensitive land uses within the 65 A-weighted decibel (dBA) day/night average sound level (L_{dn}) roadway noise contours (i.e., within 350 feet of the centerline of Broadway Street). The detailed acoustical analysis would confirm the roadway noise levels impacting the sensitive receptors and identify any necessary mitigation measures to reduce interior noise levels at the sensitive land uses to within City noise standards.

The noise analysis of the BDSP EIR concluded that any temporary ambient noise increase would not expose persons to noise levels in excess of standards established in the General Plan or Noise Ordinance. The American Canyon Municipal Code allows construction noise level impacts up to 75 dBA at residential receptors between the hours of 7:00 a.m. and 7:00 p.m. and up to 60 dBA between the hours of 7:00 p.m. and 7:00 a.m.

The noise analysis of the BDSP EIR concluded that buildout anticipated under the Specific Plan would not result in a substantial permanent increase in ambient noise levels in the BDSP vicinity.

Napa Cove Apartments Analysis

Construction Impact

The BDSP EIR anticipated development of the project site. Implementation of the project would not result in any change to the analysis or conclusions in the BDSP EIR. The closest noise sensitive receptors are the single-family residence and Melvin Park located immediately west of the project site. As discussed in the BDSP EIR, construction equipment generates high levels of intermittent noise ranging from 70 dB to 105 dB and would result in a significant impact where noise-sensitive land uses adjoin construction sites. Although construction activities would result in a substantial noise increase in such locations, this impact would be short-term and would cease upon completion of construction.

Construction activities within the City are required to adhere to the American Canyon Municipal Code's construction noise limits provided in Section 8.12.080 of the Municipal Code. Techniques to ensure compliance include, but are not limited to, the following: 1) the proposed 8-foot-high masonry sound wall along the northern and western property lines should be constructed prior to the foundation preparation activities for the proposed hotel structure; 2) no on-site operation of any heavy construction equipment shall be permitted between the hours of 7:00 p.m. and 7:00 a.m. The proposed project would comply with Section 8.12.080 of the Municipal Code. Therefore, construction noise impacts would be less than significant, and no additional mitigation is necessary. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Operational Impact

As discussed in the BDSP EIR, all analyzed roadway segments of Broadway Street and American Canyon Road would exceed the City's 65 dBA L_{dn} exterior noise standard for housing, schools, health care facilities, and other sensitive land uses, which would occur even without development of the BDSP. Per BDSP EIR MM NOI-1, a Noise and Vibration Assessment was prepared for the project by Illingworth & Rodkin, Inc. on September 21, 2021 (Appendix L). The Noise and Vibration Assessment conducted a detailed acoustical analysis for the project and concluded that the project does not have the potential to generate traffic resulting in a doubling of existing traffic volumes; therefore, the project will result in a less-than-significant impact related to permanent noise increases from project traffic. The Noise and Vibration Assessment also concluded that the project would include mechanical equipment such as heating, ventilation, and air conditioning system (HVAC) that would have the potential to exceed the City's Municipal Code nighttime noise limit of 50 dBA at the adjacent residential uses. Implementation of mitigation measure identified in the Noise and Vibration Assessment would limit the noise exposure resulting from project HVAC operations to a less-than-significant level. The proposed project will implement mitigation measure identified in the Noise and Vibration Assessment to reduce interior noise levels at the sensitive land uses to within City noise standards. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

Summary of BDSP EIR Analysis

The noise analysis of the BDSP EIR concluded that potential groundborne vibration impacts could occur with buildout of the BDSP. However, according to MM NOI-2a, any project that would utilize mobile

construction equipment within 20 feet of any existing structure with sensitive receptors would have to provide site-specific vibration analysis. However, the analysis demonstrated that construction vibration impacts would be less than significant with implementation of MM NOI-2a.

The analysis also determined that potential operations vibration impacts could occur for vibration-sensitive land use development projects located within 30 feet of a truck route or within 80 feet of a railroad line. However, the analysis demonstrated that operational vibration impacts would be less than significant with implementation of MM NOI-2b.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Implementation of the project would not result in any change to the analysis or conclusions in the BDSP EIR. Development projected by implementation of the Specific Plan may result in construction activities that occur immediately adjacent to existing homes and other vibration sensitive uses, there is a possibility that vibration from construction equipment would exceed the 0.25-inch-per-second peak particle velocity (PPV) threshold defined by California Department of Transportation for continuous/frequent intermittent sources of vibration. Therefore, groundborne vibration impacts from project construction activities would result in a significant impact. The Noise and Vibration Assessment (Appendix L) conducted a vibration analysis for potential impacts from vibration generated by construction equipment according to BDSP EIR MM NOI-2a. The vibration analysis concluded that construction-related vibration levels for construction equipment would not exceed the California Department of Transportation guidelines at the adjacent residential and commercial buildings. The impact would be less than significant.

The proposed structures would not be located within 30-feet of any roadway or within 80-feet of any railroad. Therefore, operational vibration impacts on proposed on-site receptors would be less than significant. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

- 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?*

Summary of BDSP EIR Analysis

The noise analysis of the BDSP EIR concluded that development consistent with the BDSP would not expose persons to excessive noise levels from aircraft.

Napa Cove Apartments Analysis

The entire BDSP area is located outside the 55 dBA Community Noise Equivalent Level (CNEL) noise contour of Napa County Airport. Therefore, aviation noise exposure within the BDSP area is less than 55 dBA CNEL. All development and land use activities are considered acceptable within areas exposed to aviation noise levels of less than 55 dBA CNEL. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM NOI-1

Prior to issuance of building permits of noise-sensitive land uses within the 65 dBA L_{dn} roadway noise contours shown in Exhibit 3.9-4 or within the 65 dBA L_{dn} 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.

BDSP EIR MM NOI-2a

Prior to issuance of grading permits, if construction activities will (1) pile drive within 150 feet or (2) utilize mobile construction equipment within 20 feet of any existing structure with sensitive receptors, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from construction-related vibration impacts to the existing structure(s) with sensitive receptors. The vibration analysis shall determine the vibration levels created by construction activities at the existing structure(s) with sensitive receptors and, if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.25 inch per second PPV.

Conclusion

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

3.2.14 Population and Housing

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Summary of BDSP EIR Analysis

It was concluded in the BDSP EIR that the BDSP would not include substantial direct or indirect population growth in an area. The potential population growth per year resulting from the BDSP would be within historical numeric population increase that have occurred within American Canyon and therefore, the BDSP would be planned residential growth. Therefore, the population growth was determined to be less than significant.

Napa Cove Apartments Analysis

The proposed project would involve development of 66 affordable housing units. The BDSP EIR estimated that the BDSP buildout would involve development of 1,200 dwelling units with 3.48 persons per household. The BDSP buildout would result in a population growth of 4,176 people within the BDSP boundaries over a 20-year period, which equate to 209 new residents per year. With the average number of 3.48 persons per household, the proposed 66-unit development would result in a population growth of approximately 230 people within the BDSP boundaries. Development of the project site was included in the BDSP EIR analysis. The 66 new house units and population growth of 230 people would be within the BDSP planned housing and population growth in the area. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Summary of BDSP EIR Analysis

The BDSP EIR concluded that the BDSP would not displace substantial numbers of existing, necessitating the construction of replacement housing elsewhere. Under the BDSP, no persons would be involuntary displaced and new dwelling units would be built. Therefore, this impact was determined to be less than significant.

Napa Cove Apartments Analysis

The project site is currently undeveloped. The project would not displace existing housing and people because there is not housing or people on-site. The project would construct of 66 new housing units to support new residential use. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.15 Public Services

	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
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?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
b) Police protection?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
c) Schools?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
d) Parks?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
e) Other public facilities?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

a) Fire Protection?

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. According to the BDSP EIR, payment of the development fees to fund capital improvements, as well as the Specific Plan’s proximity to the American Canyon Fire Protection District Station, and compliance with the California Fire Code requirements for emergency access, fire detection and suppression systems, and minimum fire flow would minimize the demand for fire protection. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. The proposed project would comply with the California Fire Code requirements for emergency access, fire detection and suppression systems, and minimum fire flow. The project applicant would pay the applicable development impact fees in

accordance with Ordinance 2013-01.¹³ Consistent with the BDSP EIR analysis, construction of 66 new housing units on-site would result in similar conclusions related to fire protection responses. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to fire protection services than those previously analyzed in the BDSP EIR. The project site would not require new fire department facilities to serve the project. No additional analysis is required.

b) *Police Protection?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. According to the BDSP EIR, the payment of development fees to fund capital improvements, as well as the project's proximity to the police department, would ensure that the development of an additional police station would not be required. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. The project site is located approximately 0.6 mile northwest of American Canyon Police Department at 911 Donaldson Way East and would not require new police facilities to serve the project. The project applicant would pay the required development fees to fund capital improvements. Consistent with the BDSP EIR analysis, implementation of the project would result in similar conclusions related to police protection responses. The proposed project would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to police protection service than those previously analyzed in the BDSP EIR. No additional analysis is required.

c) *Schools?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. According to the BDSP EIR, buildout of the BDSP was anticipated to generate 614 students. The BDSP EIR determined that impacts would be less than significant with payment of development fees at the time that building permits are sought. The BDSP EIR concluded that impacts would be less than significant.

¹³ City of American Canyon. 2013. *Ordinance 2013-01 An Ordinance of the American Canyon Fire Protection District Confirming and Amending the Ordinance Enacted by the Passage of Measure B, Erroneously Entitled "Resolution 2-80 and Resolution 6-80*. Website: <https://www.cityofamericancanyon.org/home/showpublisheddocument/4192/637123688573370000>. Accessed September 21, 2021.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. The BDSP EIR estimated the student generate rate for affordable housing would be approximately 1.105 students/dwelling unit with the implementation of BDSP. The proposed 66 affordable housing units would generate approximately 73 students within the BDSP boundaries. The 73 new students would be within the anticipated number of new students analyzed in the BDSP EIR. In addition, the project applicant would pay any applicant development fees. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to schools than those previously analyzed in the BDSP EIR. No additional analysis is required.

d) *Parks?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. According to the BDSP EIR, the BDSP was anticipated to increase the population of the Broadway District by approximately 4,300 residents, but impacts would be less than significant because the BDSP would require new development that occurs within the BDSP either to provide trails, parks, and recreational facilities, or to provide fees to the City of American Canyon to develop such fees elsewhere. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. The proposed project would provide 100 percent affordable housing within the project site with incentive (per Municipal Code Section 19.27.025) to reduce all private open space (patio and balcony) to at least 50 square feet with minimum depth of 5 feet from the BDSP development standards¹⁴. The reduction in private space would be negligible, because the project would also provide common open space within the Common Building and provide approximately 21,000 square feet of open space located south of the parking area. In addition, the project applicant would pay any applicable development fees to the City of American Canyon. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to parks than those previously analyzed in the BDSP EIR. No additional analysis is required.

e) *Other Public Facilities?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. According to the BDSP EIR, the BDSP's potential increase in population is a nominal increase compared with the existing population served by local libraries and

¹⁴ BDSP development standards for Broadway Residential Subarea requires ground floor patios to be at least 100 square feet with 8 feet minimum depth and upper floors balconies to be at least 50 square feet with 6 feet minimum depth.

would not be expected to require new or substantially altered library facilities or other public facilities. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. As discussed in Section 3.2.14 Impact a), the potential population growth resulting from the proposed project would be consistent with the potential population growth estimated for the buildout of the BDSP. Therefore, the proposed project's potential population increase would not be expected to require new or substantially altered library facilities or other public facilities. The impacts of the proposed project to libraries would not be more severe than those analyzed in the BDSP EIR. Implementation of the proposed project would result in similar conclusions related to library services. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to other public facilities, such as libraries, than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.16 Recreation

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than significant impact	No	No	No	None
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than significant impact	No	No	No	None

Discussion

a) and b) 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? Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Summary of BDSP EIR Analysis

The BDSP EIR concluded that the BDSP would result in a population increase. However, requirements for increased park acreage would be met by fees paid to the City of American Canyon and by proposed features of the BDSP, such as bike/pedestrian paths, parks, private recreational facilities. Therefore, impacts were determined to be less than significant.

Napa Cove Apartments Analysis

Development of the project site was included in the BDSP EIR analysis. As discussed in Section 3.2.15 Impact d), the proposed project would include development of private, common, and public open space. In addition, the project applicant would pay any applicable development fees to the City of American Canyon to increase park acreage. Implementation of the proposed project would not result in impacts not previously address in the BDSP EIR. Consistent with the BDSP EIR, implementation of the proposed project would result in similar conclusions related to recreational facilities. Therefore, the proposed project would not introduce new park and recreation impacts or create more severe park and recreation impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.17 Transportation

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Significant and unavoidable impact	No	No	No	None
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	None	No	No	No	None
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant impact	No	No	No	None
d) Result in inadequate emergency access?	Less than significant impact	No	No	No	None

Discussion

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Summary of BDSP EIR Analysis

The BDSP EIR determined that the Existing Plus Background Plus Proposed Specific Plan Traffic condition associated with the proposed Specific Plan would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The BDSP EIR concluded that impacts related to the Existing Plus Background Plus Proposed Specific Plan Traffic condition would be less than significant.

The BDSP EIR determined that the Cumulative Traffic condition associated with the proposed Specific Plan would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The BDSP EIR concluded that no feasible mitigation is available and that impacts related to the Cumulative Traffic condition would be significant and unavoidable.

The BDSP EIR determined that buildout of the BDSP may conflict with an applicable congestion management program. According to the BDSP EIR, buildout of the BDSP would generate new vehicle trips that would contribute to unacceptable operations on SR-29. The American Canyon Circulation Element contemplates mobility improvements that would promote the development of parallel routes and better

vehicular, bicycle, and pedestrian connectivity within and adjacent to the Broadway District. However, widening SR-29 to eight lanes within American Canyon is not feasible. The BDSP EIR concluded that no feasible mitigation is available and that impacts related to an applicable congestion management program would be significant and unavoidable.

Additionally, the BDSP EIR determined that the BDSP would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The BDSP EIR concluded that impacts related to policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities would be less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Implementation of the project would not result in any change to the analysis or conclusions in the BDSP EIR. It is reasonably foreseeable that the proposed project would have similar impact on traffic operations in the area as compared to the development projected in the BDSP EIR. Therefore, the proposed project would not result in any impacts more significant than those already analyzed in the BDSP EIR, the analysis and impact conclusions in the BDSP EIR adequately address the proposed project. The proposed project would not introduce new impacts or create more severe impacts related to an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Summary of BDSP EIR Analysis

This question was not included in the BDSP EIR. Thus, no VMT estimates were provided within the BDSP EIR. Additionally, the City of American Canyon had not yet adopted thresholds for VMT to determine impacts at the time the BDSP EIR was prepared.

Napa Cove Apartments Analysis

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure effects of the project on transit and non-motorized travel of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in Section 15064.3(b)(2) regarding roadway capacity, a project's effect on automobile delay does not constitute a significant environmental impact under CEQA.

The City did not have adopted VMT thresholds at the time the BDSP EIR was certified, nor does it currently have adopted VMT thresholds. Under section 21166 of the PRC and Sections 15162 and 15164 of the State CEQA Guidelines, this issue is not required to be analyzed unless it constitutes new information of substantial importance that was not known and could not have been known at the time the previous EIR was certified as complete (PRC § 21166 and CEQA Guidelines §§ 15162 and 15163). Traffic impacts were analyzed using other relevant methods at the time of certification of the BDSP EIR. Under CEQA standards, it is not considered new information that requires analysis in a supplemental EIR or negative declaration. Therefore, no additional environmental analysis is warranted under CEQA. No additional analysis is required.

- c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not create hazards associated with design features or incompatible uses. Mobility enhancements such as roadway and circulation improvements, new connections, and speed limit reductions were contemplated by the BDSP EIR in order to improve roadway conditions. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The proposed project does not include changes that could potentially introduce new hazards associated with design features or incompatible uses. Consistent with the BDSP EIR, development on the project site in the BDSP planning area would comply with all regulations related to site design, and the proposed project would not alter the mobility enhancements proposed in the BDSP EIR. A Traffic Study was prepared for the project by W-Trans on September 21, 2021 (Appendix M). The Traffic Study conducted an access analysis regarding the need for a right-turn lane and design requirements for the right-turn lane. The project would incorporate the requirements identified in the Traffic Study into the project design to ensure the project would not result in hazards to a geometric design feature. Furthermore, the City traffic engineer would review and approve the site plan prior to project approval. The proposed project would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- d) *Result in inadequate emergency access?*

Summary of BDSP EIR Analysis

The BDSP EIR determined that buildout of the BDSP would not result in inadequate emergency access and would not impair roadway safety or emergency response or evacuation. Mobility enhancements such as roadway and circulation improvements, new connections, and speed limit reductions were contemplated by the BDSP EIR in order to improve emergency response and evacuation. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The proposed project does not include changes that could potentially interfere with emergency response, access, or evacuation. Consistent with the BDSP EIR, any development in the BDSP planning area would comply with all fire codes and regulations related to emergency access. Furthermore, the City traffic engineer would review and approve the site plan prior to project approval. The proposed project would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to transportation beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR

remain unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

3.2.18 Tribal Cultural Resources

	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
Would the project:					
a) 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 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)?	<i>Less than significant impact with mitigation</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM CUL-1</i>
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? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<i>Less than significant impact with mitigation</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>MM CUL-1</i>

Discussion

- a) *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 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)?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP area is not listed on any national, State, or local registers of historic places (including those for Tribal Cultural Resources [TCRs]). Additionally, no TCRs have been previously recorded within the BDSP boundaries. However, in the event of the inadvertent discovery of TCRs, MM CUL-1 would serve to reduce the impact to a level of less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development of the project site. Consistent with the BDSP EIR, while there are no prehistoric archaeological resources recorded within the project site, it is possible that subsurface excavations during construction would encounter previously undiscovered archaeological resources. The implementation of standard cultural resources construction mitigation (BDSP EIR MM CUL-1) would ensure that this impact is less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

- 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? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Summary of BDSP EIR Analysis

On July 20, 2016, the Yocha Dehe Wintun Nation replied with a letter indicating that the BDSP could impact undiscovered archaeological deposits and requested a site visit. The City of American Canyon responded to the Tribe and scheduled a consultation meeting with Yocha Dehe representatives on August 24, 2017, at American Canyon City Hall. Yocha Dehe representatives were provided information about the BDSP and provided recommendations to City staff. This concluded the tribal consultation process.

In the event of the inadvertent discovery of TCRs, MM CUL-1 would serve to reduce the impact to a level of less than significant.

Napa Cove Apartments Analysis

Consistent with the BDSP EIR, in the event of the inadvertent discovery of TCRs, BDSP EIR MM CUL-1 would serve to reduce the impact to a level of less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM CUL-1

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

requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to tribal cultural resources. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

3.2.19 Utilities and Service System

Would the project:	Conclusion in Final EIR	Do the Proposed Project Changes Involve New or More Severe Impact?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<i>Less than significant impact</i>	No	No	No	None
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<i>Less than significant impact</i>	No	No	No	None
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<i>Less than significant impact</i>	No	No	No	None
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<i>Less than significant impact</i>	No	No	No	None
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<i>Less than significant impact</i>	No	No	No	None

Discussion

a) and b) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Summary of BDSP EIR Analysis

Wastewater

The BDSP EIR determined that buildout of the BDSP would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. According to the BDSP EIR, future development in the BDSP planning area would result in a net increase sewer flow of 66,576 gallons per day (gpd). The BDSP EIR determined that several planned capital improvement projects would address deficiencies in the sewer collection system and that new development that occurs pursuant to the BDSP would be required to either contribute fees to the City of American Canyon to fund these improvements or install them in conjunction with project implementation (subject to reimbursement for costs outside of its equitable share). This would ensure that adequate wastewater collection and treatment is provided. Impacts would be less than significant.

Water

According to the BDSP EIR, a Water Supply Assessment prepared for the BDSP EIR showed that the City's water supply is sufficient to meet projected demand, including demand within the BDSP area, in all years to 2040 and under all normal-, dry-, and multiple-dry-year scenarios. The analysis showed that demand will exceed supply during some dry years, and additional demand as a result of BDSP implementation will increase those supply deficiencies. However, the City is still anticipated to be able to meet demand through the use of carryover State Water Project (SWP) water, or through some combination of carryover SWP water, Advanced Table A Program water, demand reductions, and/or additional purchases on the open market.

In addition, the BDSP EIR determined that recycled water supply in the City is available to meet existing and projected demand and is available in sufficient volume to support non-potable uses at the project site. Use of recycled water at the site was anticipated to increase the City's utilization of this supply.

Additionally, the BDSP EIR determined that individual developments would comply with the City's Zero Water Footprint policy, which would require new accounts to offset potable water use through off-site water conservation measures, conversion of off-site potable irrigation to recycled water, on-site demand reduction (relative to existing use), or by acquiring additional supply. Impacts would be less than significant.

Stormwater Drainage

The BDSP EIR determined that buildout of the BDSP would not create a need for new or expanded downstream storm drainage facilities. According to the BDSP EIR, buildout of the BDSP would increase impervious surfaces, but new development would address post-development stormwater quality using treatment measures—LID concepts that would treat runoff and reduce the release of runoff during peak events. Additionally, City staff will review new development plans for compliance with the City's post-development stormwater requirements, which would ensure that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities such that flooding occurs. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

Wastewater

The BDSP EIR anticipated development on the project site. According to the Preliminary Sanitary Sewer Flow Generation Calculations (Appendix N), the estimated project sanitary sewer peak flow is approximately 74,250 gallon per day which is equivalent to an average daily flow of 24,750 gallon per day.¹⁵ The BDSP EIR estimated that the multi-family land use would result in an average daily sewer flow of 29,810 gallons per day at bailout conditions (Table 3.13-19 of the BDSP EIR). Therefore, the project's average daily sewer flow (24,750 gallons per day) would be within the daily sewer flow value (29,810 gallons per day) estimated in the BDSP EIR. Development of the project would be required to comply with all applicable development standards and BDSP guidelines; thus, the proposed project would not result in an increase of wastewater demand beyond what was analyzed in the BDSP EIR and would not exceed wastewater treatment requirements of the RWQCB. The proposed project would not significantly alter the conclusions of the BDSP EIR. No additional analysis is required.

Water

Development of the project would implement the City's requirements pursuant to the City's Zero Water Footprint policy, which would help to ensure that there is no net increase in potable water demand within the City, as noted in the BDSP EIR. A Water Demand Analysis (Appendix O) was prepared for the project. The Water Demand Analysis estimated that the project would result in an average of 10,560 gallons of water demand per day (11.83 acre-feet per year). The BDSP EIR estimated that at buildout, the additional water demand for residential land use would be approximately 34 acre-feet per year (Table 3.13-5 of the BDSP EIR). Therefore, the estimated water demand for the project (11.83 acre-feet per year) is within the estimated water demand (34 acre-feet per year) for residential buildout as proposed by the BDSP EIR. The proposed project would not create demand for potable water beyond what was analyzed in the BDSP EIR. The project would not require or result in the construction of new water facilities or the expansion of existing facilities. No additional analysis is required.

Stormwater Drainage

The BDSP EIR anticipated development on the project site. Implementation of the proposed project would increase impervious surface, but the project would install storm drain inlets and pipes throughout the project site to direct runoff during rain events. In addition, the proposed project would be required to meet the City's post-development stormwater requirements to capture, detain, and regulate the release of additional runoff generated by new impervious surfaces. The proposed project would not result in the construction of new stormwater drainage facilities or the expansion of existing facility beyond what was analyzed in the BDSP EIR.

Implementation of the proposed project would result in similar conclusions related to water, wastewater, and stormwater impacts. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to water, wastewater, and stormwater drainage facilities than those previously analyzed in the BDSP EIR. No additional analysis is required.

¹⁵ Peak flow is determined by multiplying average flow by a factor of three (3) per City Specifications, Section 5.23.

- 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?*

Summary of BDSP EIR Analysis

According to the BDSP EIR, the Sewer Master Plan analyzed the existing sewer collection system using two flow scenarios, Peak Dry Weather Flow and Peak Wet Weather Flow. In general, in a majority of the existing pipelines, velocities were below the recommended minimum for the Peak Dry Weather Flow scenario. Hydraulic deficiencies were identified in Broadway (Main Basin 3). In addition, based on modeling, peak flows exceeded the capacity of three of the five pump stations. However, the BDSP EIR determined that the City's planned capital improvement programs would address the deficiencies in the sewer collection system. Additionally, as previously discussed, the capital improvements would be funded by new development. Therefore, the BDSP EIR concluded that adequate wastewater collection and treatment would be provided and that impacts would be less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development on the project site and determined that the City's planned capital improvement programs would address the deficiencies in the sewer collection system. The project applicant would pay any applicable development fees for capital improvements. The proposed project would not result in a determination by a wastewater treatment provider that there is inadequate capacity to serve the project's projected demand in addition to existing commitments. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to wastewater capacity than those previously analyzed in the BDSP EIR. No additional analysis is required.

- d) and e) *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? Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP area would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs. According to the BDSP EIR, using an average of 3.89 pounds of debris per square foot for nonresidential construction and 4.38 pounds of debris per square foot of residential construction, buildout of the BDSP EIR would generate an estimated 10,299 cubic feet of waste. The BDSP EIR determined that the construction waste generated by buildout of the BDSP (10,299 cubic yards) would represent less than 0.01 percent of the remaining capacity at the Potrero Hills Landfill, and that the operational waste generated by buildout of the BDSP (7,304 cubic yards annually) would represent less than 0.01 percent of the remaining capacity at the Potrero Hills Landfill. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The BDSP EIR anticipated development on the project site. As discussed in Section 3.2.14 Impact a), the proposed project would result in population growth that is consistent with the potential population increase of the BDSP buildout. Therefore, the construction and operational waste generated by the proposed project are considered in the BDSP EIR analysis. Based on the waste generation rates, the proposed project would generate a similar amount of waste as compared to the previously contemplated residential uses. The proposed project would be served by a landfill with sufficient capacity to accommodate the proposed project's solid waste disposal needs and would not generate solid waste in

excess of State or local standards or in excess of local infrastructure, nor would the project otherwise impair the attainment of solid waste reduction goals. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to landfill capacity than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

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

3.2.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<i>Less than significant impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<i>None</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<i>None</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<i>None</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>None</i>

Discussion

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Summary of BDSP EIR Analysis

The BDSP EIR concluded that all circulation changes proposed in the BDSP would either have no impact on the emergency response and evacuation or would improve mobility for emergency response vehicles. Therefore, the BDSP EIR would not impair implementation or physically interfere with any adopted emergency response plans or emergency evacuation plans. Impacts were determined to be less than significant.

Napa Cove Apartments Analysis

The project is not located within a High Fire Hazard Severity Zone, or a Very High Fire Hazard Severity Zone as mapped by CAL FIRE¹⁶. The City of American Canyon adopted the Napa County Multi-Jurisdictional Hazard Mitigation Plan (NCMJHMP) in 2020. The plan does not identify the project site as a wildfire zone, nor does it identify evacuation routes near or in the vicinity of the site.¹⁷ The proposed project would not obstruct implementation of the NCMJHMP. Consistent with the BDSP EIR, any development in the BDSP plan area would have to comply with all fire codes and regulations related to emergency access. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Summary of BDSP EIR Analysis

This checklist question did not exist at the time that the BDSP EIR was certified. Additionally, impacts associated with pollutants from wildfire were not evaluated in other sections in the BDSP EIR. No conclusion was made about the significance level of environmental impacts regarding wildfire risks or risk of exposure to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Napa Cove Apartments Analysis

As discussed in Impact a) above, the project site is not located in a within a High Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone. In the City of American Canyon, the wind is mostly from the west from February to November and from the north from November to February.¹⁸ The windiest day of the year occurs in July with an average hourly wind speed of 8.4 miles per hour.¹⁹ The project site is not located in a State Responsibility Area or nearby wildland areas. The project site is located on relatively flat land. The project site does not embody conditions that would exacerbate a wildlife. The proposed project would not exacerbate or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildlife due to slope, prevailing winds, or other factors. The impact would be less than significant.

¹⁶ CAL FIRE. *Fire Hazards Severity Zone Viewer*. Website: <https://egis.fire.ca.gov/FHSZ/>. Accessed September 21, 2021.

¹⁷ County of Napa. 2020. Multi-Jurisdictional Hazard Mitigation Plan 2020 Update. Website: <https://mitigatehazards.com/napa-county-mjhmp/documents/>. Accessed September 21, 2021.

¹⁸ Weather Spark. Climate and Average Weather Year Round in American Canyon California, United States. Website: <https://weatherspark.com/y/586/Average-Weather-in-American-Canyon-California-United-States-Year-Round>. Accessed September 21, 2021.

¹⁹ Ibid.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Summary of BDSP EIR Analysis

This checklist question did not exist at the time that the BDSP EIR was certified. Additionally, impacts associated with pollutants from wildfire were not evaluated in other sections in the BDSP EIR. No conclusion was made about the significance level of environmental impacts regarding the installation or maintenance of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Infrastructure-related impacts were address in the BDSP EIR in Section 3.13, Utilities and Service Systems, which described the City of American Canyon’s existing utility systems and assessed potential environmental effects related to utility services. Furthermore, the BDSP EIR discussed the effects the BDSP would have on the ability of the City of American Canyon and other service providers to deliver services to the BDSP and vicinity. Impacts were determined to be less than significant.

Napa Cove Apartments Analysis

The proposed project would not include the installation or maintenance of associated infrastructures (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk. The impact would be less than significant.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Summary of BDSP EIR Analysis

This checklist question did not exist at the time the BDSP EIR was certified. However, impacts related to landslides and flooding were discussed in Section 3.5, Geology, Soils, and Seismicity. The BDSP EIR determined that the BDSP area contains mostly flat land. Moreover, most, if not all, of the properties with the BDSP boundaries either support urban development or have been rough graded, which makes the likelihood of landslides very low. Impacts were determined to be less than significant.

The BDSP EIR determined that the Specific Plan would not place housing or structures within a 100-year flood hazard area. According to the BDSP EIR, the flood hazard areas within the Specific Plan coincide with the Southern Gateway subarea, where no new development is proposed by the BDSP. Therefore, development and land use activities contemplated by the Specific Plan would not expose persons or structures to new risks associated with 100-year or 500-year flood hazards. The BDSP EIR concluded that impacts would be less than significant.

Napa Cove Apartments Analysis

The project site is flat and is not located in a Landslide Zone as delineated by the California Geological Survey.²⁰ The project would implement BDSP EIR MM HYD-1a to address impacts related to flooding. The proposed project would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR. Therefore, the proposed project would not expose people or structures to

²⁰ California Geological Survey. Earthquake Zones of Required Investigation. Website: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed September 21, 2021.

significant risks due to runoff, post-fire slop instability, or drainage changes. The impact would be less than significant.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to wildfire beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

3.2.21 Mandatory Findings of Significance

	<i>Conclusion in Final EIR</i>	<i>Do the Proposed Project Changes Involve New or More Severe Impact?</i>	<i>New Circumstances Involving New or More Severe Impacts?</i>	<i>New Information Requiring New Analysis or Verification?</i>	<i>Mitigation Measures</i>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<i>Less than significant with mitigation</i>	No	No	No	<i>MM BIO-1b, MM CUL-1, MM CUL-4</i>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<i>Less than significant with mitigation</i>	No	No	No	<i>Applicable BDSP EIR MMS as discussed throughout this Addendum</i>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<i>Less than significant with mitigation</i>	No	No	No	<i>Applicable BDSP EIR MMS as discussed throughout this Addendum</i>

Discussion

- a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section 3.2.4, Biological Resources, the proposed project would not have significant impacts beyond what was analyzed in the BDSP EIR. BDSP EIR MM BIO-1b would be applicable to the proposed project and would be implemented prior to tree removal activities that occur during the nesting season. The proposed project would have no significant impacts related to the potential for the degradation of the quality of the environment, a substantial reduction in the habitat of a fish or wildlife species, the drop of a fish or wildlife population below self-sustaining levels, a substantial reduction in the number or restriction on the range of a rare or endangered plant or animal.

Furthermore, as discussed in Sections 3.2.5 and 3.2.18, Cultural Resources and Tribal Cultural Resources, the proposed project would not have significant impacts with respect to major periods of California history or prehistory beyond what was analyzed in the BDSP EIR. BDSP EIR MM CUL-1 and MM CUL-4 would be implemented in the event prehistoric or historic-period archaeological resources are encountered or in the event of discovery or recognition of any human remains during the project's ground disturbing activities. The proposed project would have no significant impacts related to the potential for elimination of important examples of major periods of California history or prehistory.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The proposed project's impacts would be individually limited and not cumulatively considerable. Based on the analysis provided in Section 3.2.3, Air Quality; Section 3.2.13, Noise, and Section 3.2.17, Transportation, the proposed project would not substantially increase cumulative impacts related to these analysis areas. Additionally, as presented throughout this Addendum, the proposed project's cumulative impacts would be consistent with BDSP EIR.

- c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

The proposed project has not been found to generate new or substantially more severe environmental effects than those previously analyzed in the BDSP EIR; therefore, there is no likelihood of the proposed project causing substantial adverse effects on human beings, either directly or indirectly, beyond that which was previously analyzed in the BDSP EIR. Impacts would be consistent with what was analyzed in the BDSP EIR

Mitigation Measures

Implement all BDSP mitigation measures discussed in this Addendum.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant cumulative impacts beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain

unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

7.0 REFERENCES

- CAL FIRE. *Fire Hazards Severity Zone Viewer*. Website: <https://egis.fire.ca.gov/FHSZ/>. Accessed September 21, 2021.
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- WRA, Inc. September 2021. Biological Resources Technical Report Napa Cove American Canyon Development.

8.0 LIST OF PREPARERS

Project Applicant

CRP Affordable Housing & Community Development

- Shady Fayed, Project Manager

Environmental Consultant

WRA, Inc.

- Geoffrey Reilly, Senior Associate Environmental Planner
- Yingying Cai, Environmental Planner

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Appendices

- Appendix A – Location Figures**
- Appendix B – Project Site Plan**
- Appendix C – Health Risk Analysis**
- Appendix D – Biological Resources Technical Report**
- Appendix E – Cultural Resources Study**
- Appendix F – Earthquake Fault Investigation Report**
- Appendix G – Geotechnical Engineering Investigation Report**
- Appendix H – Phase I Environmental Site Assessment**
- Appendix I – Phase II Environmental Site Assessment**
- Appendix J – Preliminary Stormwater Control Plan**
- Appendix K – Preliminary Hydrology Analysis**
- Appendix L – Noise and Vibration Assessment**
- Appendix M – Traffic Study**
- Appendix N – Preliminary Sanitary Sewer Flow Generation Calculations**
- Appendix O – Water Demand Calculations**

Appendix A – Location Figures

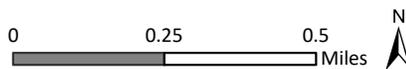


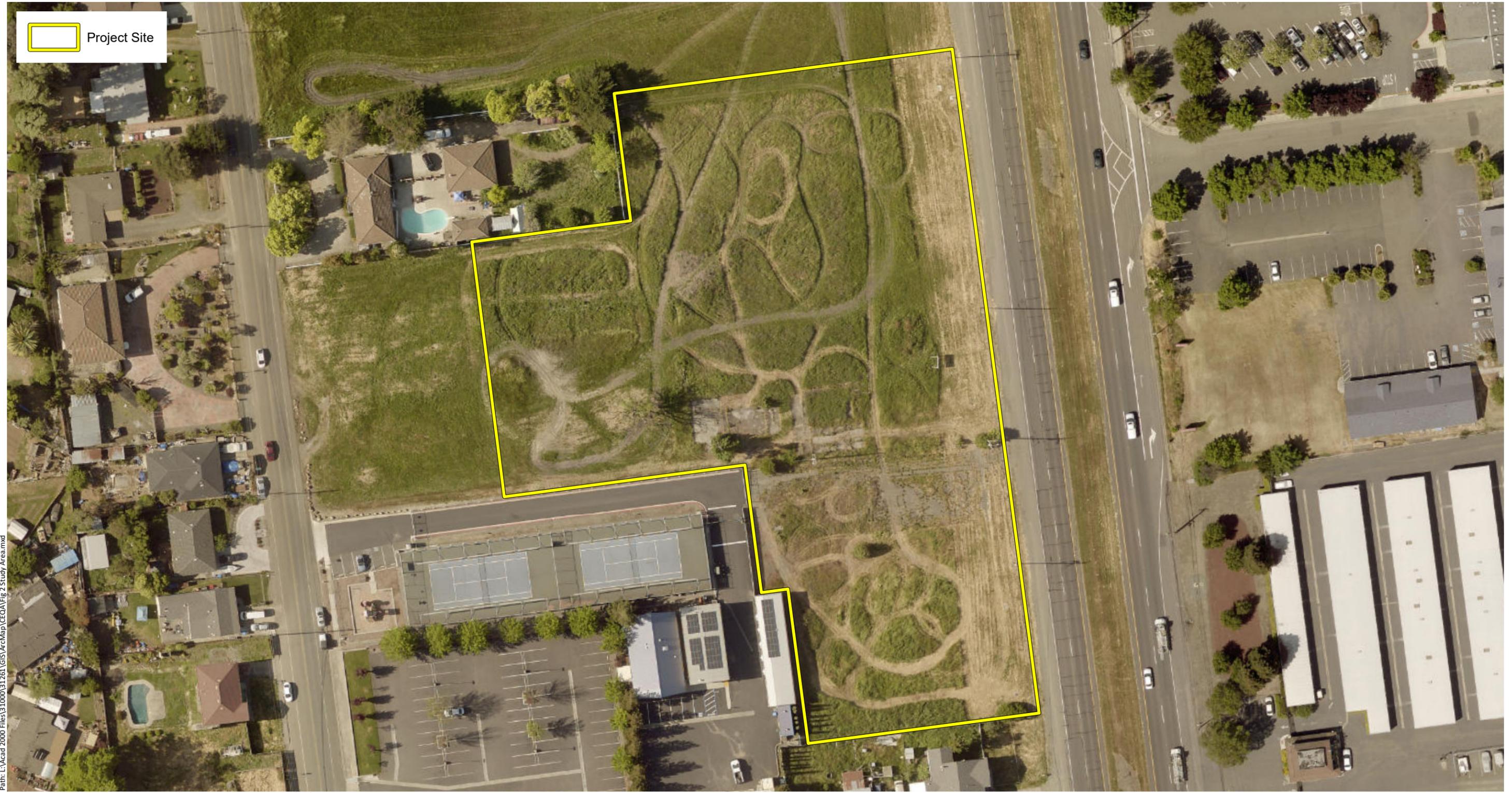
Path: L:\Acad 2000 Files\31000\31261\GIS\ArcMap\CEQA\Fig 1 Location.mxd

Sources: National Geographic, WRA | Prepared By: czumwalt, 9/20/2021

Figure 1. Location Map

Napa Cove American Canyon
Napa County, California





Path: L:\Acad 2000 Files\31000\31261\GIS\ArcMap\CEQA\Fig 2 Study Area.mxd

Sources: DigitalGlobe 2016 Aerial, WRA | Prepared By: czumwalt, 9/20/2021

Figure 2. Project Site

Napa Cove American Canyon
Napa County, California



Appendix B – Project Site Plan

PROJECT INFORMATION

PROJECT NAME: NAPA COVE APARTMENTS
ADDRESS: BROADWAY ROAD
 AMERICAN CANYON, CA 94503
OWNER / APPLICANT: CRP AFFORDABLE GROUP
APNs: 058-362-005 / 058-362-021 / 058-362-016
LOT AREA: +/-151,588 SF / +/-3.48 ACRES
 (HED UNABLE TO CONFIRM SITE AREA / OWNER TO PROVIDE SURVEY)

PROJECT DESCRIPTION: CAMPUS STYLE, MULTI-FAMILY DEVELOPMENT CONSISTING OF 66 DWELLING UNITS ACROSS 3 RESIDENTIAL BUILDINGS (2 & 3 STORIES) OF TYPE V-A CONSTRUCTION. SURFACE PARKING PROVIDED THROUGHOUT PROPERTY.

AFFORDABLE UNIT COUNT: MULTI-FAMILY DEVELOPMENT CONSISTS OF 100% AFFORDABLE DWELLING UNITS EXCLUDING ONE MANAGER UNIT.

CONSTRUCTION TYPE: TYPE V-A
OCCUPANCY: R2 & B OCCUPANCIES
ZONING: BASE ZONING: COMMUNITY COMMERCIAL (W/ RESIDENTIAL SPECIFIC PLAN AREA: OVERLAY)

ALLOWABLE BLDG HEIGHT: BROADWAY DISTRICT SPECIFIC PLAN - BROADWAY RESIDENTIAL
PROPOSED BLDG HEIGHT: 42 FEET W/ 30FT SETBACK
SETBACKS (REQUIRED): 33' - 11"
 BROADWAY R.O.W.
 MELVIN ROAD R.O.W. 30 FEET OFF BROADWAY R.O.W.
 MIN. SIDE YARD 15 FEET OFF MELVIN ROAD R.O.W.
 MIN. REAR YARD 10 FEET
PROPOSED DENSITY:

UNIT TYPE	SQUARE FOOTAGE	QUANTITY	MIX PERCENTAGE
1 BEDROOM UNIT	633 SF	16	24%
2 BEDROOM UNIT	853 SF	32	49%
3 BEDROOM UNIT	1,100 SF	18	27%
TOTAL UNITS			66

ADA UNITS: 10 UNITS
 (3) 1-BEDROOM UNITS
 (4) 2-BEDROOM UNITS
 (3) 3-BEDROOM UNITS
COMMUNICATION (HVI) UNITS: 7 UNITS
 (2) 1-BEDROOM UNITS
 (3) 2-BEDROOM UNITS

UNIT TOTALS

UNIT TOTALS - BUILDING A

BUILDING	UNIT TYPE	QUANTITY
A	2 BEDROOM UNIT	12
A	3 BEDROOM UNIT	6
		18

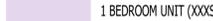
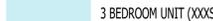
UNIT TOTALS - BUILDING B

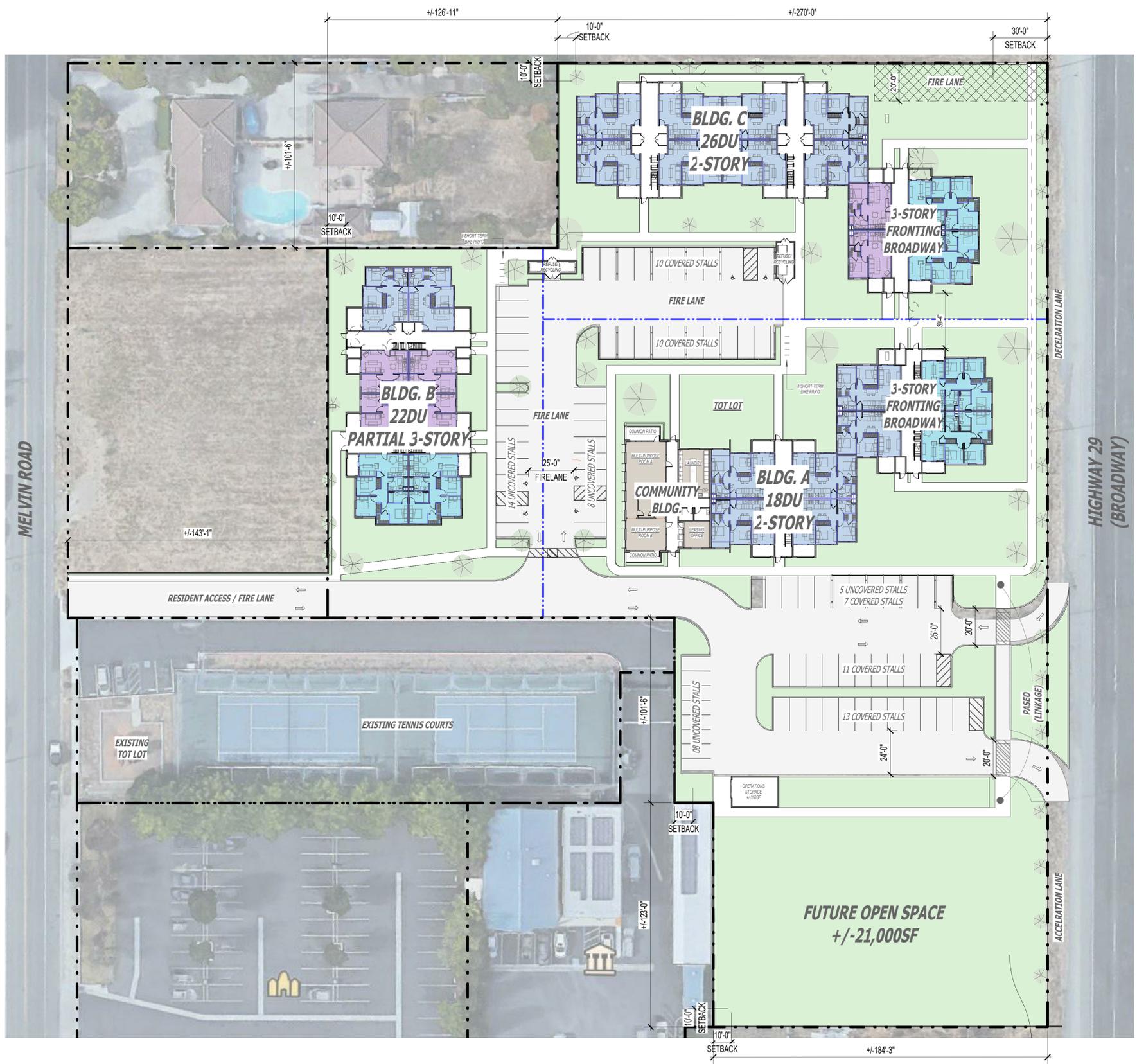
BUILDING	UNIT TYPE	QUANTITY
B	1 BEDROOM UNIT	12
B	2 BEDROOM UNIT	4
B	3 BEDROOM UNIT	6
		22

UNIT TOTALS - BUILDING C

BUILDING	UNIT TYPE	QUANTITY
C	1 BEDROOM UNIT	4
C	2 BEDROOM UNIT	16
C	3 BEDROOM UNIT	6
		26

HATCH LEGEND

	COMMON BUILDING		1 BEDROOM UNIT (XXXSF)
	RETAIL (PHASE II)		2 BEDROOM UNIT (XXXSF)
			3 BEDROOM UNIT (XXXSF)



Appendix C – Health Risk Analysis



MEMORANDUM

Date: 6 December 2021

To: City of American Canyon Public Works Department

From: Ivy Tao, Baseline Environmental Consulting

Subject: **Napa Cove Apartments, City of American Canyon, Napa County, California
Draft Air Quality Health Risk Memorandum**

The project proposes a new multi-residential affordable housing development. The proposed project would include 66 residential units across three two- and three-story buildings, surface parking, common open space, and landscape improvements. The project site is located west of Broadway (State Route 29), east of Melvin Road, and north of Donaldson Way, in the Broadway Residential Subarea within the Broadway District Specific Plan (BDSP) area. Because the project would introduce new sensitive receptors (residences) to the project site, the project is subject to the mitigation measures (MM) identified in the BDSP Environmental Impact Report (EIR), including MM AIR-4a, as follows:

MM AIR-4a: *Prior to issuance of building permits for any sensitive receptor use (residential areas, elementary school, daycare centers, etc.) that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:*

- 1. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the Bay Area Air Quality Management District's (BAAQMD's) cumulative risk threshold for toxic air contaminant impacts.*
- 2. Prepare and submit a Health Risk Analysis to the City of American Canyon, consistent with BAAQMD's recommended methodology, that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the BAAQMD's cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.*

This air quality health risk memorandum satisfies the second option of MM AIR-4a: prepare and submit a Health Risk Analysis (HRA). This memorandum evaluates the potential health risk impacts to future residential receptors associated with implementation of the proposed project. The primary health risk concern associated with the project is related to the exposure of future residential receptors on the project site to emissions of toxic air contaminants (TACs) from existing and reasonably foreseeable future sources.

PROJECT ANALYSIS

Health Risk Screening Thresholds

For risk assessment purposes, TACs are separated into carcinogens and non-carcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per 1 million exposed individuals over a lifetime of exposure. Non-carcinogenic substances are generally assumed to have a safe threshold below which health impacts would not occur. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the sum of expected exposure levels divided by the corresponding acceptable exposure levels.

The Bay Area Air Quality Management District (BAAQMD) has established health risk screening thresholds to evaluate significant adverse health effects from exposure to TACs.¹ The health risk screening thresholds, presented below, are supported by substantial evidence presented in the BAAQMD’s Revised Draft Options and Justification Reports.²

Table 1: BAAQMD Health Risk Screening Thresholds

Impact Analysis	Pollutant	Screening Thresholds
Project	TACs	Cancer risk increase > 10 in one million Chronic HI > 1.0
	Exhaust PM _{2.5}	0.3 µg/m ³ (annual average)
Cumulative Sources	TACs	Cancer risk increase > 100 in one million Chronic HI > 10.0
	Exhaust PM _{2.5}	0.8 µg/m ³ (annual average)

Note: TACs = Toxic air contaminants; HI = Hazard index; PM_{2.5} = Fine particulate matter; µg/m³ = micrograms per cubic meter.

Source: BAAQMD, 2017.

Project-Level Operational Health Risk Impacts

Operation of the proposed project would not introduce any new stationary sources of TACs, such as an emergency diesel generator. Therefore, health risk impacts from project operation on the future project residents would not exceed the BAAQMD’s project-level health risk thresholds.

Cumulative Operational Health Risk Impacts

Operation of the proposed project could expose future residents to TAC emissions from cumulative sources. The BAAQMD recommends evaluating the potential cumulative health risks from existing and

¹ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

² Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report; California Environmental Quality Act Thresholds of Significance, October.

Memorandum

6 December 2021

Page 3

reasonably foreseeable future sources of TACs, such as stationary sources, major roadways, freeways, and railroads.

The BAAQMD's online screening tools were used to provide conservative estimates of how much existing TAC sources would contribute to cancer risk, HI, and PM_{2.5} concentrations at the project site. The individual health risks associated with each source were summed to find the cumulative health risk at the project site.

Based on the BAAQMD's Permitted Stationary Sources Risks and Hazards Screening Tool³ and confirmation from BAAQMD staff,⁴ only one existing stationary source of TAC emissions (Plant 5329) was identified about 1,050 feet northeast of the project site. The BAAQMD staff recommends using the distance multiplier tool to refine the screening health risk values at the project site. The screening health risks from the stationary source are shown in **Table 2**, and the supporting health risk calculations are included in **Attachment A**. There are no foreseeable future sources of TACs within 1,000 feet of the project site.

The project site is located near State Route 29 and the Union Pacific Railroad. Preliminary health risk screening values at the project site from exposure to mobile sources of TACs were estimated based on the BAAQMD's Bay Area modeling of health risks from highways, railroads, and major roadways with an average annual daily traffic (AADT) volume greater than 30,000 vehicles per day.⁵ The BAAQMD also recommends using the Roadway Screening Analysis Calculator⁶ to evaluate health risks from roadways with between 10,000 and 30,000 AADT. However, based on the preliminary review of the nearby roadway segments analyzed in the BDSP EIR, there are no roadway segments with AADT between 10,000 and 30,000 AADT within 1,000 feet of the project site. The screening health risks from mobile sources are shown in **Table 2**.

³ Bay Area Air Quality Management District (BAAQMD), 2020. Permitted Stationary Sources Risks and Hazards Screening Tool. Available at <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>. Last updated on March 26, 2020.

⁴ From: Josephine Fong at the Bay Area Air Quality Management District; To: Ivy Tao at Baseline Environmental Consulting, 2021. Email Communication Titled: Stationary Source Information Request. November 22.

⁵ Bay Area Air Quality Management District (BAAQMD), 2014. BAAQMD Planning Healthy Places Highway, Major Street, and Rail health risk raster files.

⁶ Bay Area Air Quality Management District (BAAQMD), 2015. Roadway Screening Analysis Calculator, April 16.

Memorandum

6 December 2021

Page 4

Table 2: Summary of Cumulative Health Risks to Future Project Receptors

Sources	Source Type	Method Reference	Cancer Risk	Chronic HI from DPM	Exhaust PM _{2.5}
			Per million	Unitless	µg/m ³
Golden State Lumber Inc (Plant 5329)	Woodwork	1,3	<0.1	<0.01	0.861
Highways	Mobile	2	7.7	NA	0.12
Major Roadways	Mobile	2	0.1	NA	<0.01
Railroads	Mobile	2	4.9	NA	0.01
Total Health Risk			13	<0.01	1.0
Total Health Risk with MERV-13			2	<0.01	0.15
BAAQMD's Health Risk Screening Thresholds			100	10	0.8

Note: PM_{2.5} = Fine particulate matter; HI = Hazard index; µg/m³ = micrograms per cubic meter; DPM = Diesel particulate matter; MERV = minimum efficiency reporting value.

Bold and shaded indicates exceedance of the applicable BAAQMD's screening level.

Health risk screening values derived using the following BAAQMD tools and methodologies:

- 1) BAAQMD's 2018 stationary source emissions data.
- 2) BAAQMD's Planning Healthy Places Highway, Railroad, and Major Roadway health risk raster files, 2014.
- 3) BAAQMD's recommended Office of Environmental Health Hazard Assessment cancer risk adjustment factor.

Source: BAAQMD, 2021.

Attachment A.

As shown in **Table 2**, cancer risk and chronic HI at the proposed project site would be below the BAAQMD's cumulative health risk screening threshold; however, PM_{2.5} concentrations at the proposed project site would be above the BAAQMD's cumulative health risk screening thresholds. Air filtration systems can be installed to reduce the potential PM_{2.5} concentrations at the proposed project site. The project would install air filtration devices with minimum efficiency reporting value (MERV) equal to or higher than 13 (MERV-13).⁷ The MERV rating system provides a scale showing the effectiveness of air filtration devices at removing particles at different sizes. The California Air Resources Board has identified high-efficiency filtration as the most effective method for residences to reduce incoming concentrations of particulate matter from outdoor air.⁸ An air filtration device rated MERV-13 can reduce levels of indoor PM_{2.5} by at least 85 percent relative to the incoming outdoor air.⁹ Therefore, as shown in **Table 2**, implementation of MERV-13 devices would reduce the cumulative excess cancer risk and PM_{2.5} concentrations at the project site to acceptable levels.

⁷ From: Yingying Cai at WRA, Inc; To: Ivy Tao at Baseline Environmental Consulting, 2021. Email Communication Titled: Affordable Housing Project HRA Proposal. November 23.

⁸ California Air Resources Board, 2012. Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution. 23 August.

⁹ South Coast Air Quality Management District, 2009. Pilot Study of High Performance Air Filtration for Classrooms Applications. October.

Memorandum

6 December 2021

Page 5

CONCLUSION

With the installation of air filtration devices rated equal to or higher than MERV-13, the proposed project would not expose future project occupants to substantial project-level and cumulative health risks during project operation.

Air Quality Health Risk Memorandum

Attachment A

for

Napa Cove Apartments

City of American Canyon, Nap County, California

Existing Stationary Source Confirmation from Bay Area Air Quality Management District

Plant#	Plant Name	Address	City	St	Zip	County	UTM_E (km)	UTM_N (km)	Cancer_20 Hazard_20 PM2.5_20:	Type
5329	Golden Sta	150 So Napa	Vallejo	CA	94590	Napa	565438	4225731		6.53 Woodworking (1)



Step 1:
Enter Facility Data

Plant Name Golden State Lumber Inc

Plant No. 5329

Step 2:
Estimate Distance

What is the distance (m) from the facility boundary to the MEI? 0

Step 3:
Enter Emissions Data

Chemical Name	CAS No. <small>(dashes removed)</small>	Rate <small>(lb/day)</small>	Risk <small>(# / 1,000,000)</small>	Hazard <small>(index)</small>	Concentration <small>(µg/m³)</small>
Fine Particulate Matter (PM2.5)		3.46E+00			6.53

Step 4:
Specify Source Type

Does facility have only diesel backup generators? no

Is this analysis for a gas station? no

Note: Default generic distance multiplier used if source is not a generator or gas station.

Step 5:
Read Estimates

Total Cancer Risk	0.000	per 1,000,000
Total Chronic Hazard	0.001	
Total PM2.5 Concentration	6.532	µg/m ³



Step 1:
Enter Facility Data

Plant Name **Golden State Lumber Inc**

Plant No. **5329**

Step 2:
Estimate Distance

What is the distance (m) from the facility boundary to the MEI? **300**

Step 3:
Enter Emissions Data

Chemical Name	CAS No. <small>(dashes removed)</small>	Rate <small>(lb/day)</small>	Risk <small>(# / 1,000,000)</small>	Hazard <small>(index)</small>	Concentration <small>(µg/m³)</small>
Fine Particulate Matter (PM2.5)		3.46E+00			6.53

Step 4:
Specify Source Type

Does facility have only diesel backup generators? **no**

Is this analysis for a gas station? **no**

Note: Default generic distance multiplier used if source is not a generator or gas station.

Step 5:
Read Estimates

Total Cancer Risk	0.000	per 1,000,000
Total Chronic Hazard	0.000	
Total PM2.5 Concentration	0.861	µg/m ³

Appendix D – Biological Resources Technical Report

BIOLOGICAL RESOURCES TECHNICAL REPORT
NAPA COVE AMERICAN CANYON DEVELOPMENT
AMERICAN CANYON, NAPA COUNTY, CALIFORNIA



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SEPTEMBER 2021



TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Overview and Purpose	1
1.2 Project Description.....	1
2.0 REGULATORY BACKGROUND	4
2.1 Federal and State Regulatory Setting	4
2.1.1 Vegetation and Aquatic Communities	4
2.1.2 Special-status Species	5
2.2 Local Plans and Policies.....	7
3.0 ASSESSMENT METHODOLOGY	9
3.1 Vegetation Communities and Other Land Cover Types.....	9
3.2 Special-status Species	10
3.3 Wildlife Corridors and Native Wildlife Nursery Sites	10
4.0 ECOLOGICAL SETTING	12
4.1 Soils and Topography.....	12
4.2 Climate and Hydrology.....	12
4.3 Land-use.....	12
5.0 ASSESSMENT RESULTS	13
5.1 Vegetation Communities and Other Land Cover	13
5.1.1 Terrestrial Land Cover	13
5.1.2 Aquatic Resources.....	13
5.2 Special-status Species	14
5.2.1 Special-status Plants	14
5.2.2 Special-status Wildlife.....	14
5.3 Wildlife Corridors and Native Wildlife Nursery Sites	15
6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA	17
7.0 IMPACTS AND MITIGATION EVALUATION	18
7.1 Special-status Species	18
7.2 Sensitive Natural Communities and Land Cover Types	19
7.3 Aquatic Resources.....	19
7.4 Wildlife Corridors and Native Wildlife Nursery Sites	19
7.5 Local Policies and Ordinances.....	20
7.6 Habitat Conservation Plans.....	20
8.0 REFERENCES	21

LIST OF TABLES

Table 1. Summary of Biological Resources Evaluation	2
Table 2. Vegetation Community and Land Cover Types	13

LIST OF PHOTOS

Photo 1. Photograph of typical Ruderal Vegetation on-site.....	13
Photo 2. Photograph of the Study Area Facing South along Highway 29.....	15

LIST OF APPENDICES

Appendix A – Figures

Figure 1. Study Area Location

Figure 2. Aerial Photograph of Study Area

Figure 3. Study Area Soils

Figure 4. Natural Communities and Land Cover within the Study Area

Appendix B – Species Observed within and around the Study Area

Appendix C – Special-Status Species Potential Table

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DEFINITIONS

Study Area: The area throughout which the assessment was performed, inclusive of 3.48 acres spanning across the following APNs: 058-362-005; 058-362-021; 058-362-016.

LIST OF ACRONYMS

BIOS	Biogeographic Information and Observation System
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Napa
Corps	U.S. Army Corps of Engineers
CSRL	California Soils Resources Lab
CWA	Clean Water Act
EIR	Environmental Impact Report
ESA	Federal Endangered Species Act
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation & Management
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
OHWM	Ordinary High Water Mark
Rank	California Rare Plant Ranks
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resource Control Board
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WRA	WRA, Inc.

1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and mitigation measures for the Napa Cove American Canyon Development Project located in the Broadway District Planning Area, Napa County, California (Figure 1, Appendix A). The proposed project (Project) involves a campus style, multi-family development consisting of 66 dwelling units across three residential buildings.

1.1 Overview and Purpose

This report provides an assessment of biological resources within the Study Area and immediate vicinity. The purpose of the assessment was to develop and gather information on sensitive biological communities and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Study Area for (1) the presence of sensitive biological communities, special-status plant species, and special-status wildlife species, (2) the potential for the site to support special-status plant and wildlife species. Based on the results of the site assessment, potential impacts to sensitive biological communities and special-status species resulting from the proposed project were evaluated. If the project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The proposed project (Project) is a multi-family affordable housing development that consists of 66 units across three (3) buildings (two- and three-story). The units would be 100 percent affordable. The project includes the following elements:

- Building A: two-story with 18 dwelling units and a community building.
- Building B: two-story and partial three-story with 22 dwelling units.
- Building C: two-story with 26 dwelling units.
- Surface parking: 72 covered parking spaces and 28 uncovered parking spaces.
- Common open space – Interior: multi-purpose rooms, patios, storage, leasing office, and laundry room.
- Common open space – Exterior: Tot lot and Napa Cove Park.
- Other landscaping improvements.

TABLE 1. SUMMARY OF BIOLOGICAL RESOURCES EVALUATION

CEQA ASSESSMENT CATEGORY ¹ IV. -BIOLOGICAL RESOURCES	BIOLOGICAL RESOURCES CONSIDERED	RELEVANT LAWS AND REGULATIONS	RESPONSIBLE REGULATORY AGENCY	SUMMARY OF FINDINGS & REPORT SECTION ²
Question A. Special-status species	Special-status Plants Special-status Wildlife Designated Critical Habitat	Federal Endangered Species Act California Endangered Species Act California Native Plant Protection Act Migratory Bird Treaty Act Bald and Golden Eagle Protection Act	U.S. Fish and Wildlife Service National Marine Fisheries Service California Department of Fish and Wildlife	No potentially significant impacts were identified. No mitigation is required for less than significant impacts. See Section 5.2 for more information
Question B. Sensitive natural communities & riparian habitat	Sensitive Natural Communities Streams, Lakes, & Riparian Habitat	California Fish and Game Code Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act	California Department of Fish and Wildlife U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	No potentially significant impacts were identified. No mitigation is required for less than significant impacts. See Section 5.1 for more information

¹ CEQA Questions have been summarized here; see Section 6.2 for details.

² As given in this report; see Section 5.0 subheadings

TABLE 1. SUMMARY OF BIOLOGICAL RESOURCES EVALUATION

CEQA ASSESSMENT CATEGORY ¹ IV. -BIOLOGICAL RESOURCES	BIOLOGICAL RESOURCES CONSIDERED	RELEVANT LAWS AND REGULATIONS	RESPONSIBLE REGULATORY AGENCY	SUMMARY OF FINDINGS & REPORT SECTION ²
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act Sections 404/401 Rivers and Harbors Act Section 10 Porter Cologne Act	U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	No potentially significant impacts were identified. No mitigation is required for less than significant impacts. See Section 5.1 for more information
Question D. Fish & wildlife corridors	Essential Fish Habitat Wildlife Corridors	California Fish and Game Code Magnuson-Stevens Fishery Conservation & Management Act	California Department of Fish and Wildlife National Marine Fisheries Service	No potentially significant impacts were identified. No mitigation is required for less than significant impacts. See Section 5.1 for more information
Question E. Local policies	Protected Trees Coastal zone resources Other biological protections	Local Tree Ordinance General Plan (e.g., Stream & Wetland Setbacks) Local ordinances	Local and regional agencies California Coastal Commission San Francisco Bay Conservation and Development Commission	No potentially significant impacts were identified. The Project will comply with local ordinances and policies including the Tree Removal Ordinance.
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act Natural Community Conservation Planning Act	U.S. Fish and Wildlife Service California Department of Fish and Wildlife	No potentially significant impacts were identified. No mitigation is required for less than significant impacts.

2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Game (CDFW), and aquatic communities protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2021) and keeps records of their occurrences in its California Natural Diversity Database (CNDDDB; CDFW 2021). Vegetation alliances are ranked 1 through 5 in the CNDDDB based on NatureServe's (2021) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act.

Waters of the United States, Including Wetlands: The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply

only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands: The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit, but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGF). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream”, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

2.1.2 Special-status Species

Endangered and Threatened Plants, Fish, and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species’ designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as “listed species”). “Proposed” or “candidate” species are those that are being considered for listing, and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. “Take” under the ESA is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in take of an ESA-listed

species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features “essential to the conservation of the species”. Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGF 2050 et seq.) prohibits a take of any plant and animal species that the CFGF determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species which are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in the CFGF as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGF. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 “rare” or “endangered” plant species, and prevents “take”, with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America’s eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act (MBTA) of 1918 and CFGF, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA. To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Inventory) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a

Rank of 3, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 species and all Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Plans and Policies

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 in the Study Area. Only those applicable to the proposed project are discussed herein:

GOAL 8: Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

OBJECTIVE 8.1 AND POLICIES 8.1.1 AND 8.1.4

- 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 AND POLICY 8.2.1

- Objective 8.2: Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savannah, 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 savannah, 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 if 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 AND POLICY 8.3.1

- 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" (see below).
 - 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.

POLICIES 8.3.5 AND 8.3.6

- 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.

City of American Canyon Tree Ordinance. The City of American Canyon Tree Ordinance (Ord. 18.40.110) requires the following:

- A. Existing trees shall be preserved on the site unless otherwise approved by the city council as a part of the site development plans.
- B. Unless specifically approved by the city council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a twenty-four-inch box of the same species unless specifically approved by the city council. (Ord. 98-10 § 1 (part), 1998).

Broadway District Specific Plan. The Study Area is located within the Broadway District Specific Plan (or Specific Plan) boundary. The Specific Plan sets forth development regulations for the residential and commercial/mixed uses along with design guidelines, parks, multiuse trails, and related infrastructure in the Broadway District. An Environmental Impact Report (EIR) was previously prepared to evaluate the potential environmental impacts associated with the implementation of the Specific Plan. The EIR was certified in 2019.

3.0 ASSESSMENT METHODOLOGY

On August 27, 2021, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic communities, unvegetated land cover types, document plant and wildlife species present, and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- Soil Survey of Napa County, California (USDA 1978)
- Cuttings Wharf 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2018)
- Contemporary aerial photographs (Google Earth 2021)
- Historical aerial photographs (NETR 2021)
- National Wetlands Inventory (USFWS 2021a)
- California Aquatic Resources Inventory (SFEI 2017)
- CNDDDB (CDFW 2021)
- CNPS Inventory (CNPS 2021)
- Consortium of California Herbaria (CCH1 2021, CCH2 2021)
- USFWS List of Federal Endangered and Threatened Species (USFWS 2021b)
- eBird Online Database (eBird 2021)
- CDFW Publication, California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2021)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2021)

Database searches (i.e., CNDDDB, CNPS) for special-status species focused on the Cuttings Wharf, Sonoma, Napa, Mount George, Sears Point, Cordelia, Petaluma Point, Mare Island, and Benicia USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review over the course of one day to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) are present, and (4) if special-status species are present³.

3.1 Vegetation Communities and Other Land Cover Types

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural

³ Due to the timing of the assessment, it may or may not constitute protocol-level species surveys; see Section 4.2 if the site assessment would constitute a formal or protocol-level species survey.

Community List (CDFW 2021) and A Manual of California Vegetation, Online Edition (CNPS 2021). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]), were evaluated as sensitive as part of this evaluation (CDFW 2021).

The site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (“Corps Manual”; Environmental Laboratory 1987), and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (“Arid West Supplement”; Corps 2008).

3.2 Special-status Species

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. Presence of suitable habitat for special-status species was evaluated during the site visit based on physical and biological conditions of the site as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- Present. Species is observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site in the recent past.

If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available

through the CDFW Biogeographic Information and Observation System (BIOS; CDFW 2021). Additionally, aerial imagery (Google 2021) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).

4.0 ECOLOGICAL SETTING

The approximately 3-acre Study Area is located in American Canyon, Napa County, California. The Study Area consists of three relatively flat parcels. Portions of the Study Area were previously developed and remain hardscaped. The Study Area is regularly mowed for fuels management. A few native and non-native trees occur along the interior of the Study Area. Additional details of the local setting are below.

4.1 Soils and Topography

The overall topography of the Study Area is flat with elevations ranging from approximately 60 to 70 feet above sea level. According to the *Soil Survey of Napa County* (USDA 1978), the Study Area is underlain by one soil mapping units: Clear Lake clay. Soils within the Study Area are shown in Appendix A – Figure 3. The parent soil series of all the Study Area’s mapping units are summarized below.

Clear Lake clay, drained, 0 to 2 percent slopes: This series consists of clayey soils formed from basin alluvium derived from igneous, metamorphic, and sedimentary rock. It is situated on basin floors at elevations ranging from 10 to 800 feet (CSRL 2021, USDA 1978). These soils are considered hydric, and are poorly drained with high runoff (USDA 1978).

4.2 Climate and Hydrology

The Study Area is located in the southern extent of Napa County. The average monthly maximum temperature in the area is 69.4 degrees Fahrenheit, while the average monthly minimum temperature is 46.8 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 22.18 inches.

The local watershed is American Canyon Creek – Frontal San Pablo Estuaries (HUC 12: 180500020401) and the regional watershed is San Pablo Bay (HUC 8: 18050002). The Study Area is located in the central portion of the American Canyon Creek watershed. Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land-use

The majority of the Study Area is ruderal (weedy) habitat. Undeveloped areas consist of grasses, weedy vegetation and a few scattered trees. Developed areas include areas of gravel fill or remnant concrete building foundations. Detailed plant community descriptions are included in Section 5.1 below, and all observed plant species are included in Appendix B. Surrounding land uses include residential and commercial development, interspersed with several small undeveloped parcels (Google Earth 2021). Historically, the Study Area included a building and associated infrastructure in the center of the Study Area (NETR 2021).

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed two land cover types within the Study Area: developed and ruderal. Land cover types within the Study Area are illustrated in Figure 4 (Appendix A). No sensitive communities were observed.

TABLE 2. VEGETATION COMMUNITY AND LAND COVER TYPES

COMMUNITY/LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA
<i>Terrestrial Community/Land Cover</i>			
ruderal	non-sensitive	none	3.03
developed	non-sensitive	none	0.45

5.1.1 Terrestrial Land Cover

Ruderal. CDFW Rank: None. The majority of the Study Area consists of ruderal vegetation subject to regular mowing. Ruderal vegetation covers 3.03 acres within the Study Area. The ruderal vegetation consists of wild oats (*Avena fatua*), Bermuda grass (*Cynodon dactylon*), Italian ryegrass (*Festuca perennis*), and common weeds such as fennel (*Foeniculum vulgare*), chicory (*Cichorium intybus*), and field bindweed (*Convolvulus arvensis*). Scattered native and non-native trees are also present including Fremont cottonwood (*Populus fremontii*) and coast live oak (*Quercus agrifolia*). This community is not considered sensitive by Napa County, CDFW, or any other regulatory entity.

Developed Area (no vegetation alliance). CDFW Rank: None. Developed areas total 0.45 acres of the Study Area. Developed areas included remnant concrete slabs from previous structures, driveways, and parking lots, characterized by gravel fill. In the developed areas, vegetation is minimal and composed of common weeds as described above. The Urban/Built-up NCLC type is synonymous with the developed areas (Thorne et al. 2004). This community is not considered sensitive by Napa County, CDFW, or any other regulatory entity.



PHOTO 1. PHOTOGRAPH OF TYPICAL RUDERAL VEGETATION ON-SITE.

5.1.2 Aquatic Resources

No seasonal wetlands were observed within the Study Area. The slight topographic depressions on the site are dominated by Bermuda grass (*Cynodon dactylon*) (FACU) which is not a wetland-associated species.

5.2 Special-status Species

5.2.1 Special-status Plants

No special-status plants have been documented on or adjacent to the Study Area (CDFW 2021). Species observed within the Study Area during the August 27, 2021 site visit are listed in Appendix B. Based upon a review of the resource databases listed in Section 3.0, 47 special-status plant species have been documented in the vicinity of the Study Area. Appendix C summarizes the potential for each of these species to occur within the Study Area. Of the 47 special-status species, all are considered unlikely, or have no potential, to occur in the Study Area for one or more of the following reasons:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., volcanic tuff, serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., interior chaparral, tidal marsh) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Study Area were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;
- Land use history and contemporary management (e.g., previous development, routine mowing, on-going disturbance) has degraded the localized habitat necessary to support the special-status plant species.

5.2.2 Special-status Wildlife

No special-status wildlife species have been documented on or adjacent to the Study Area (CDFW 2021). Species observed within the Study Area during the August 27, 2021 site visit are listed in Appendix B. Based upon a review of the resource databases listed in Section 3.0, 39 special-status wildlife species have been documented in the vicinity of the Study Area. Appendix C summarizes the potential for each of these species to occur within the Study Area. Of the 39 special-status species, all are considered unlikely, or have no potential, to occur in the Study Area.

Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools
- Perennial aquatic habitat (e.g., streams, rivers or ponds)
- Tidal or freshwater marsh areas
- Old growth redwood or fir forest
- Cliffs or rocky outcroppings
- Sandy beaches or alkaline flats
- Presence of specific host plants
- Caves, mine shafts, or abandoned buildings

The absence of such habitat features eliminates components critical to the survival or movement of special-status species found in the vicinity. For instance, California red-legged frog (*Rana draytonii*) is known to occur in the vicinity. The closest known California red-legged frog occurrence is approximately 0.5 miles northeast of the Study Area (CNDDDB Occurrence No. 896). The California red-legged frog at this location was found in a dry cement tank adjacent to a large quarry pond. State Route 29 is located between this occurrence site and the Study Area and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the Study Area. In addition, the Study Area does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that California red-legged frog is unlikely to occur in the Study Area.

Given the Study Area's relative proximity to sensitive habitats on the San Pablo Bay, many species documented nearby are additionally obligates to marine or tidal marsh habitats which are not present on or in the immediate vicinity of the Study Area.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

No native wildlife nursery sites are present in the Study Area.

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms "landscape linkage" and "wildlife corridor" are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Soulé and Terbough 1999; Beier and Loe 1992). It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area



PHOTO 2. PHOTOGRAPH OF THE STUDY AREA FACING SOUTH ALONG HIGHWAY 29

planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Study Area is not within a designated wildlife corridor (CalTrans 2010). The site is located within a larger tract of developed land within the City of American Canyon in Napa County. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the Study Area itself does not provide corridor functions beyond connecting similar undeveloped land parcels in surrounding areas. Commercial development, residential development, and State Route-29 immediately adjacent to the Study Area, likely create a barrier for wildlife with limited crossing opportunities.

The Study Area is also within the Pacific Flyway, a major corridor for migratory birds, particularly given the extensive marsh habitats along the Napa River. However, the habitat within the Study Area is marginal for migratory birds since the ruderal grassland in the Study Area is subject to regular mowing, and portions remain hardscaped. Higher quality habitat in the nearby Napa River corridor to the west and the open space in the region of the site is more likely to support migrating birds.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it 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 U.S. 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, regulations, or by the California Department of Fish and Wildlife or U.S. 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 native wildlife nursery sites;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,
- 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.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a “substantial adverse effect” is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.2 above, the following section describes potential significant impacts to sensitive resources within the Study Area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

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

Potential impacts and mitigation for potentially significant impacts are discussed below.

Nesting Birds

Special-status species are unlikely to nest within the Study Area. However, common birds protected under the MBTA and CFGC may nest within trees or on the ground within the Study Area. Impacts to nesting birds or their eggs and young would be considered a potentially significant impact.

Potential Impact BIO-1: Potential impacts to nesting bird species from the proposed Project include disturbance to nesting birds and possibly death of adults and/or young. Impacts to nesting birds from the proposed Project would be potentially significant.

To reduce potential impacts these species to a less-than-significant level, the following measures will be implemented:

Mitigation Measure BIO-1: If Project activities must be conducted during the nesting season (February 15 and September 1), a pre-construction nesting bird survey will be conducted by a qualified biologist no more than 14 days prior to vegetation removal or initial ground disturbance. The survey will include the project area and within a minimum 500 feet of all Project areas to identify the location and status of any nests that could potentially be affected either directly or indirectly by Project activities.

If active nests of native nesting bird species are located during the nesting bird survey, a work exclusion zone will be established around each nest by the qualified biologist. Established exclusion zones will remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes will be determined by a qualified biologist and will vary based on species, nest location, existing visual buffers, noise levels, and other factors. An exclusion zone radius may be as small as 50 feet for common, disturbance-adapted species, or as large as 250 feet or more for raptors. Exclusion zone size will be reduced from established levels by a qualified biologist if nest monitoring findings indicate that Project activities do not adversely impact the nest, and if a reduced exclusion zone would not adversely affect the nest.

Implementation of this mitigation measure will reduce potential impacts to nesting birds to a level that is less than significant.

7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

No sensitive natural communities were observed within the Study Area. The Project will have no impacts to sensitive natural communities.

7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or BCDC in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on state or 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;

No aquatic resources were observed within the Study Area. The Project will have no direct or indirect impacts to aquatic resources.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

Large commercial developments and State Route-29 that are located immediately adjacent to the Study Area likely create a barrier for wildlife with limited crossing opportunities. While common wildlife species likely utilize the site to some degree for local movements, the Study Area is surrounded by large tracts of open space. As such, the loss of the Study Area as a migration corridor will result in a less than significant impact on a regional scale.

Migratory birds may use the habitat within the Study Area opportunistically; however, higher quality habitat exists along the Napa River corridor. The marginal habitat within the Study Area offers only limited

habitat for species along the Pacific Flyway. Based on these factors, the construction of the Project will result in a less than significant impact to migratory corridors and habitat linkages.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

The General Plan policies related to biological resources examined in this analysis are detailed in Section 2.2. This report represents a Biological Assessment Report documenting findings from background research, and presents the current habitats and species present on the project site. Proposed development in the Study Area does not impact watercourses, riparian habitat, vernal pools or wetlands. The proposed Project will remain consistent with the policies (applicable to all Project components), and will therefore have no impact with regard to local plan and policy consistency.

The Project may require removal of trees including coast live oak, Fremont cottonwood and other non-native trees (cherry and palm). In accordance with the City's Tree Ordinance, any tree removed will be replaced on the site, as approved by the City Council.

The Project is within the Broadway Specific Plan Area. The Project is designed to be consistent with the Specific Plan.

No impact to local policies and ordinances will occur.

7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The proposed project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No such plan exists applicable to the Study Area. No impact will occur.

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APPENDIX A – FIGURES

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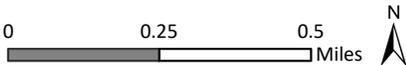


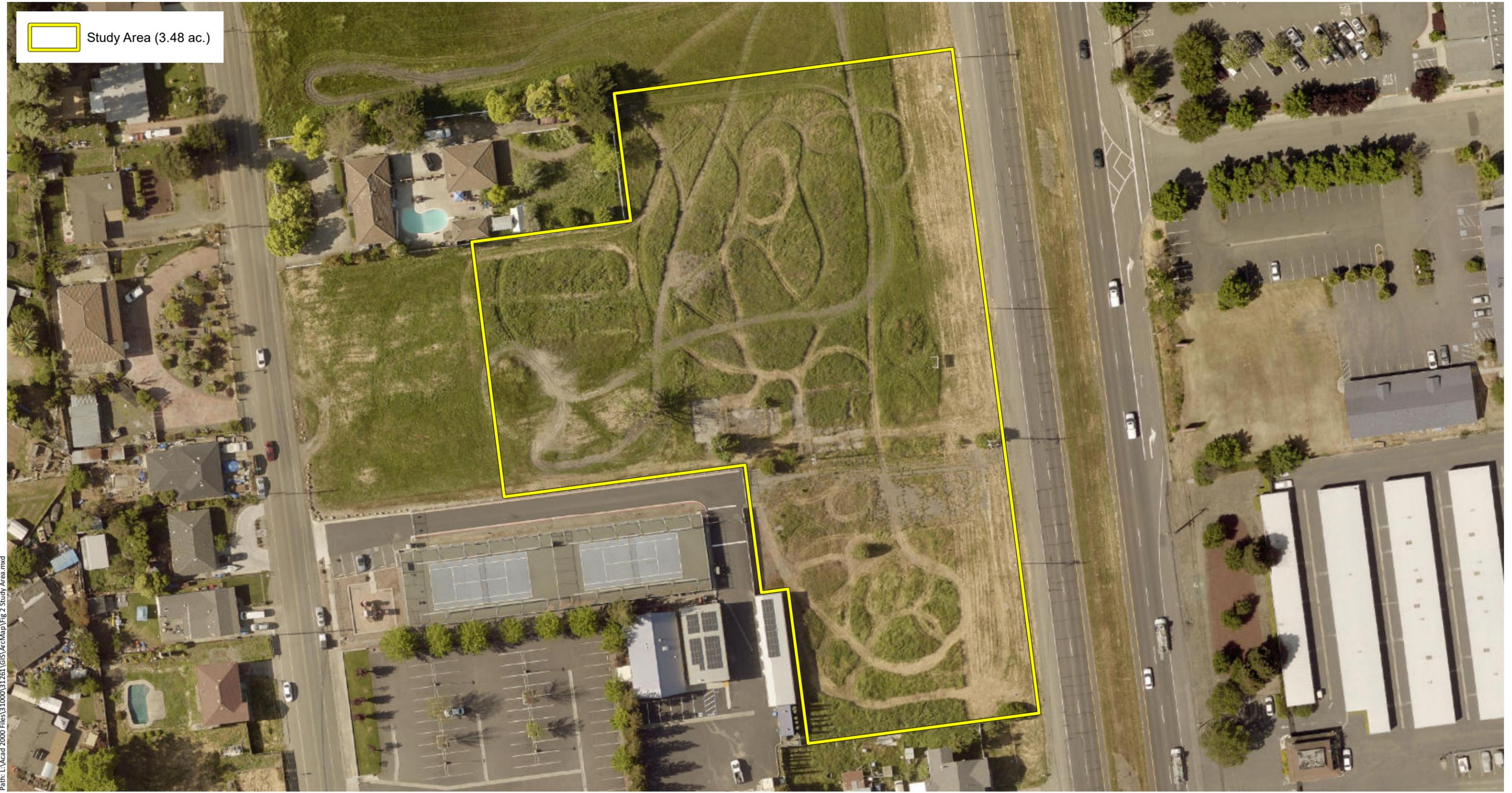
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Sources: National Geographic, WRA | Prepared By: czumwalt, 9/7/2021

Figure 1. Location Map

Napa Cove American Canyon
Napa County, California





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Sources: DigitalGlobe 2016 Aerial, WRA | Prepared By: czumwalt, 9/7/2021

Figure 2. Study Area

Napa Cove American Canyon
Napa County, California

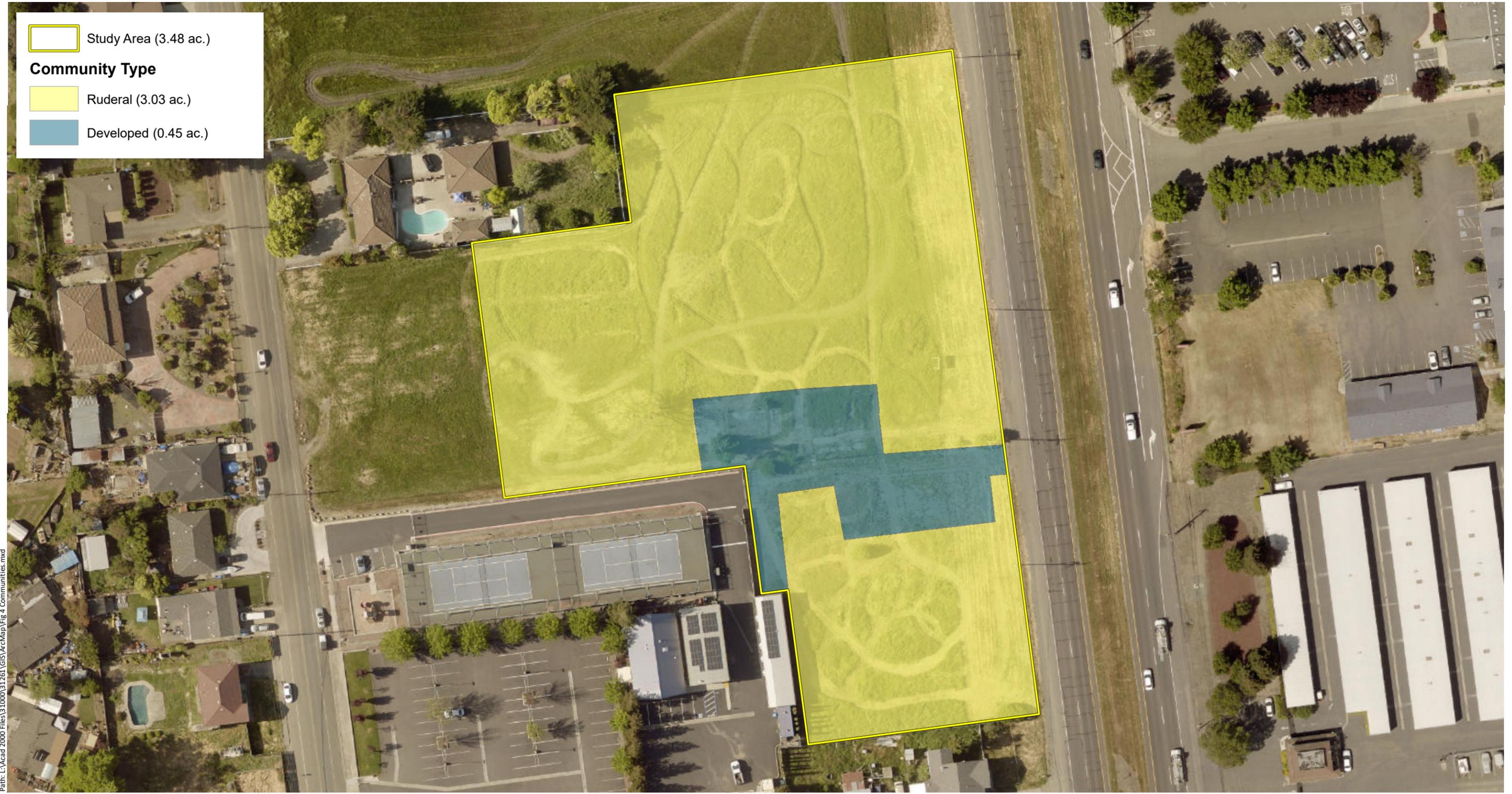




Figure 3. Soils Map

Napa Cove American Canyon
Napa County, California





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Sources: DigitalGlobe 2016 Aerial, WRA | Prepared By: czumwalt, 9/7/2021

Figure 4. Natural Communities

Napa Cove American Canyon
Napa County, California



APPENDIX B – SPECIES OBSERVED IN AND AROUND THE STUDY AREA

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Appendix B – Table 1. Plant Species Observed on August 27, 2021

SCIENTIFIC NAME	COMMON NAME
<i>Ammi sp.</i>	-
<i>Avena fatua</i>	Wild oats
<i>Bromus diandrus</i>	Ripgut brome
<i>Centaurea solstitialis</i>	Yellow star-thistle
<i>Cichorium intybus</i>	Chicory
<i>Cirsium vulgare</i>	Bull thistle
<i>Convolvulus arvensis</i>	field bindweed
<i>Cynodon dactylon</i>	Bermuda grass
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Dittrichia graveolens</i>	Stinkwort
<i>Epilobium brachycarpum</i>	Willow herb
<i>Festuca perennis</i>	Italian rye grass
<i>Foeniculum vulgare</i>	fennel
<i>Hemizonia congesta</i>	Hayfield tarweed
<i>Hirschfeldia incana</i>	Short-podded mustard
<i>Lactuca serriola</i>	Prickly lettuce
<i>Lotus corniculatus</i>	Common bird's-foot trefoil
<i>Nerium oleander</i>	Oleander
<i>Paspalum dilatatum</i>	Dallas grass
<i>Picris echioides</i>	Bristly oxtongue
<i>Phalaris aquatica</i>	Harding grass
<i>Phyla nodiflora</i>	Frogfruit
<i>Plantago lanceolata</i>	Ribwort
<i>Populus fremontii</i>	Fremont cottonwood
<i>Prunus sp.</i>	Plum
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rumex crispus</i>	Curly dock
<i>Washingtonia filifera</i>	California fan palm
<i>Sonchus asper</i>	Prickly sow-thistle
<i>Tragopogon porrifolius purple</i>	Common salsify
<i>Trifolium hirtum</i>	Rose clover
<i>Vicia sativa</i>	Common vetch
<i>Vulpia sp.</i>	-

SCIENTIFIC NAME	COMMON NAME
Pittosporum sp.	pittosporum
<i>Quercus agrifolia</i>	Coast live oak

Appendix B: Table 2: Wildlife Species Observed on August 27, 2021.

Scientific Name	Common Name	Conservation Status
Mammals		
<i>Thomomys bottae</i>	Botta's pocket gopher	-
Birds		
<i>Aphelocoma californica</i>	California scrub-jay	-
<i>Cathartes aura</i>	Turkey vulture*	-
<i>Corvus brachyrhynchos</i>	American crow	-
<i>Elanus leucurus</i>	white-tailed kite*	CDFW Fully Protected
<i>Falco sparverius</i>	American kestrel	-
<i>Haemorhous mexicanus</i>	House finch	-
<i>Hirundo rustica</i>	Barn swallow	-
<i>Mimus polyglottos</i>	Northern mockingbird	-
<i>Spinus psaltria</i>	lesser goldfinch	-
<i>Sturnus vulgaris</i>	European starling	-
<i>Zenaida macroura</i>	mourning dove	-

*flyover

APPENDIX C – SPECIAL-STATUS SPECIES POTENTIAL TABLE

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APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
<i>Plants</i>				
pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	Rank 1B.2	chaparral, coastal prairie, marshes and swamps, meadows and seeps, valley and foothill grassland. Elevation ranges from 0 to 1380 feet (0 to 420 meters). Blooms May-Nov.	No potential. No suitable habitat is present within the Study Area. None observed during appropriately-timed survey.	No further recommendations for this species.
Mt. Diablo fairy-lantern <i>Calochortus pulchellus</i>	Rank 1B.2	chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevation ranges from 100 to 2755 feet (30 to 840 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Henderson's bent grass <i>Agrostis hendersonii</i>	Rank 3.2	valley and foothill grassland, vernal pools. Elevation ranges from 230 to 1000 feet (70 to 305 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
twig-like snapdragon <i>Antirrhinum virga</i>	Rank 4.3	chaparral, lower montane coniferous forest. Elevation ranges from 330 to 6610 feet (100 to 2015 meters). Blooms Jun-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
congested-headed hayfield tarplant <i>Hemizonia congesta</i> ssp. <i>congesta</i>	Rank 1B.2	valley and foothill grassland. Elevation ranges from 65 to 1835 feet (20 to 560 meters). Blooms Apr-Nov.	Common species found onsite.	No further recommendations for this species.
soft salty bird's-beak <i>Chloropyron molle</i> ssp. <i>molle</i>	FE, SR, Rank 1B.2	marshes and swamps. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms Jun-Nov.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
modest rockcress <i>Arabis modesta</i>	Rank 4.3	chaparral, lower montane coniferous forest. Elevation ranges from 395 to 2625 feet (120 to 800 meters). Blooms Mar-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
San Joaquin spearscale <i>Extriplex joaquinana</i>	Rank 1B.2	chenopod scrub, meadows and seeps, playas, valley and foothill grassland. Elevation ranges from 5 to 2740 feet (1 to 835 meters). Blooms Apr-Oct.	No potential. No suitable habitat is present within the Study Area. None observed during appropriately-timed survey.	No further recommendations for this species.
holly-leaved ceanothus <i>Ceanothus purpureus</i>	Rank 1B.2	chaparral, cismontane woodland. Elevation ranges from 395 to 2100 feet (120 to 640 meters). Blooms Feb-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Sonoma ceanothus <i>Ceanothus sonomensis</i>	Rank 1B.2	chaparral. Elevation ranges from 705 to 2625 feet (215 to 800 meters). Blooms Feb-Apr.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Diablo helianthella <i>Helianthella castanea</i>	Rank 1B.2	broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4265 feet (60 to 1300 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Suisun Marsh aster <i>Symphotrichum lentum</i>	Rank 1B.2	marshes and swamps. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms (Apr)May-Nov.	No potential. No suitable habitat is present within the Study Area. None observed during appropriately-timed survey.	No further recommendations for this species.
big-scale balsamroot <i>Balsamorhiza macrolepis</i>	Rank 1B.2	chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 5100 feet (45 to 1555 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Sonoma sunshine <i>Blennosperma bakeri</i>	FE, SE, Rank 1B.1	valley and foothill grassland, vernal pools. Elevation ranges from 35 to 360 feet (10 to 110 meters). Blooms Mar-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
two-carpellate western flax <i>Hesperolinon bicarpellatum</i>	Rank 1B.2	chaparral. Elevation ranges from 195 to 3295 feet (60 to 1005 meters). Blooms (Apr)May-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Brewer's western flax <i>Hesperolinon breweri</i>	Rank 1B.2	chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 100 to 3100 feet (30 to 945 meters). Blooms May-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Tiburon paintbrush <i>Castilleja affinis var. neglecta</i>	FE, ST, Rank 1B.2	valley and foothill grassland. Elevation ranges from 195 to 1310 feet (60 to 400 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Rincon Ridge ceanothus <i>Ceanothus confusus</i>	Rank 1B.1	chaparral, cismontane woodland, closed-cone coniferous forest. Elevation ranges from 245 to 3495 feet (75 to 1065 meters). Blooms Feb-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
western leatherwood <i>Dirca occidentalis</i>	Rank 1B.2	broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar(Apr).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
dwarf downingia <i>Downingia pusilla</i>	Rank 2B.2	valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1460 feet (1 to 445 meters). Blooms Mar-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
small spikerush <i>Eleocharis parvula</i>	Rank 4.3	marshes and swamps. Elevation ranges from 5 to 9910 feet (1 to 3020 meters). Blooms (Apr)Jun-Aug(Sep).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
green monardella <i>Monardella viridis</i>	Rank 4.3	broadleafed upland forest, chaparral, cismontane woodland. Elevation ranges from 330 to 3315 feet (100 to 1010 meters). Blooms Jun-Sep.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
fragrant fritillary <i>Fritillaria liliacea</i>	Rank 1B.2	cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
thin-lobed horkelia <i>Horkelia tenuiloba</i>	Rank 1B.2	broadleaved upland forest, chaparral, valley and foothill grassland. Elevation ranges from 165 to 1640 feet (50 to 500 meters). Blooms May-Jul(Aug).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE, Rank 1B.1	cismontane woodland, playas, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Rank 1B.2	marshes and swamps. Elevation ranges from 0 to 15 feet (0 to 5 meters). Blooms May-Jul(Aug-Sep).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
legenere <i>Legenere limosa</i>	Rank 1B.1	vernal pools. Elevation ranges from 5 to 2885 feet (1 to 880 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	SR, Rank 1B.1	marshes and swamps, riparian scrub. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Nov.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
redwood lily <i>Lilium rubescens</i>	Rank 4.2	broadleaved upland forest, chaparral, lower montane coniferous forest, north coast coniferous forest, upper montane coniferous forest. Elevation ranges from 100 to 6265 feet (30 to 1910 meters). Blooms Apr-Aug(Sep).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Napa lomatium <i>Lomatium repostum</i>	Rank 1B.2	chaparral, cismontane woodland. Elevation ranges from 295 to 3380 feet (90 to 1030 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Cobb Mountain lupine <i>Lupinus sericatus</i>	Rank 1B.2	broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 900 to 5005 feet (275 to 1525 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
nodding harmonia <i>Harmonia nutans</i>	Rank 4.3	chaparral, cismontane woodland. Elevation ranges from 245 to 3200 feet (75 to 975 meters). Blooms Mar-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
alkali milk-vetch <i>Astragalus tener var. tener</i>	Rank 1B.2	playas, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
dark-mouthed triteleia <i>Triteleia lugens</i>	Rank 4.3	broadleaved upland forest, chaparral, coastal scrub, lower montane coniferous forest. Elevation ranges from 330 to 3280 feet (100 to 1000 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Carquinez goldenbush <i>Isocoma arguta</i>	Rank 1B.1	valley and foothill grassland. Elevation ranges from 5 to 65 feet (1 to 20 meters). Blooms Aug-Dec.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
saline clover <i>Trifolium hydrophilum</i>	Rank 1B.2	marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 985 feet (0 to 300 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Jepson's leptosiphon <i>Leptosiphon jepsonii</i>	Rank 1B.2	chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 330 to 1640 feet (100 to 500 meters). Blooms Mar-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
woolly-headed lessingia <i>Lessingia hololeuca</i>	Rank 3	broadleaved upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 50 to 1000 feet (15 to 305 meters). Blooms Jun-Oct.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Marin knotweed <i>Polygonum marinense</i>	Rank 3.1	marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms (Apr)May-Aug(Oct).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Lobb's aquatic buttercup <i>Ranunculus lobbii</i>	Rank 4.2	cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
California beaked-rush <i>Rhynchospora californica</i>	Rank 1B.1	bogs and fens, lower montane coniferous forest, marshes and swamps, meadows and seeps. Elevation ranges from 150 to 3315 feet (45 to 1010 meters). Blooms May-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
two-fork clover <i>Trifolium amoenum</i>	FE, Rank 1B.1	coastal bluff scrub, valley and foothill grassland. Elevation ranges from 15 to 1360 feet (5 to 415 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
big tarplant <i>Blepharizonia plumosa</i>	Rank 1B.1	valley and foothill grassland. Elevation ranges from 100 to 1655 feet (30 to 505 meters). Blooms Jul-Oct.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Greene's narrow-leaved daisy <i>Erigeron greenei</i>	Rank 1B.2	chaparral. Elevation ranges from 260 to 3295 feet (80 to 1005 meters). Blooms May-Sep.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
streamside daisy <i>Erigeron biolettii</i>	Rank 3	broadleaved upland forest, cismontane woodland, north coast coniferous forest. Elevation ranges from 100 to 3610 feet (30 to 1100 meters). Blooms Jun-Oct.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
St. Helena fawn lily <i>Erythronium helenae</i>	Rank 4.2	chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 1150 to 4005 feet (350 to 1220 meters). Blooms Mar-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Congdon's tarplant <i>Centromadia parryi ssp. congdonii</i>	Rank 1B.1	valley and foothill grassland. Elevation ranges from 0 to 755 feet (0 to 230 meters). Blooms May-Oct(Nov).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
bristly leptosiphon <i>Leptosiphon acicularis</i>	Rank 4.2	chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
chaparral ragwort <i>Senecio aphanactis</i>	Rank 2B.2	chaparral, cismontane woodland, coastal scrub. Elevation ranges from 50 to 2625 feet (15 to 800 meters). Blooms Jan-Apr(May).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Brewer's calandrinia <i>Calandrinia breweri</i>	Rank 4.2	chaparral, coastal scrub. Elevation ranges from 35 to 4005 feet (10 to 1220 meters). Blooms (Jan)Mar-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Franciscan onion <i>Allium peninsulare var. franciscanum</i>	Rank 1B.2	cismontane woodland, valley and foothill grassland. Elevation ranges from 170 to 1000 feet (52 to 305 meters). Blooms (Apr)May-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Napa false indigo <i>Amorpha californica var. napensis</i>	Rank 1B.2	broadleaved upland forest, chaparral, cismontane woodland. Elevation ranges from 165 to 6560 feet (50 to 2000 meters). Blooms Apr-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
narrow-anthered brodiaea <i>Brodiaea leptandra</i>	Rank 1B.2	broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 360 to 3000 feet (110 to 915 meters). Blooms May-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Lyngbye's sedge <i>Carex lyngbyei</i>	Rank 2B.2	marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Aug.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Tracy's clarkia <i>Clarkia gracilis ssp. tracyi</i>	Rank 4.2	chaparral. Elevation ranges from 215 to 2135 feet (65 to 650 meters). Blooms Apr-Jul.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
oval-leaved viburnum <i>Viburnum ellipticum</i>	Rank 2B.3	chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 705 to 4595 feet (215 to 1400 meters). Blooms May-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Bolander's water-hemlock <i>Cicuta maculata var. bolanderi</i>	Rank 2B.1	marshes and swamps. Elevation ranges from 0 to 655 feet (0 to 200 meters). Blooms Jul-Sep.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
coast iris <i>Iris longipetala</i>	Rank 4.2	coastal prairie, lower montane coniferous forest, meadows and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May(Jun).	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Napa bluecurls <i>Trichostema ruygtii</i>	Rank 1B.2	chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 100 to 2230 feet (30 to 680 meters). Blooms Jun-Oct.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Parry's rough tarplant <i>Centromadia parryi ssp. rudis</i>	Rank 4.2	valley and foothill grassland, vernal pools. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms May-Oct.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
johnny-nip <i>Castilleja ambigua var. ambigua</i>	Rank 4.2	coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Napa checkerbloom <i>Sidalcea hickmanii ssp. napensis</i>	Rank 1B.1	chaparral. Elevation ranges from 1360 to 2000 feet (415 to 610 meters). Blooms Apr-Jun.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.
Jepson's coyote-thistle <i>Eryngium jepsonii</i>	Rank 1B.2	valley and foothill grassland, vernal pools. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Aug.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - PLANTS

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
long-styled sand-spurrey <i>Spergularia macrotheca var. longistyla</i>	Rank 1B.2	marshes and swamps, meadows and seeps. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May.	No potential. No suitable habitat is present within the Study Area.	No further recommendations for this species.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
Reptiles and Amphibians				
western pond turtle	<i>Emys marmorata</i>	CDFW Species of Special Concern	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	No potential. No aquatic habitat is present within the Study Area. The nearest documented occurrence for this species is 1.12 miles southwest of the Study Area. However, American Canyon Rd. and several residential developments separate the Study Area and this occurrence. Therefore, dispersal into the Study Area is unlikely.
Alameda whipsnake	<i>Masticophis lateralis euryxanthus</i>	Federal Threatened California Threatened	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	No potential. No suitable chaparral or hardwood habitat is present within the Study Area. The Study Area is outside of this species' range.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
California giant salamander	<i>Dicamptodon ensatus</i>	CDFW Species of Special Concern	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	No Potential. No coniferous or mixed forests or aquatic breeding habitat is present within the Study Area.
foothill yellow-legged frog	<i>Rana boylei</i>	California Endangered CDFW Species of Special Concern	Found in or adjacent to rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	No Potential. No aquatic habitat is present within the Study Area. The nearest documented occurrence for this species is 0.85 miles north of the Study Area, however Highway 29 and several commercial developments separate the Study Area and this occurrence. Therefore, dispersal into the Study Area is unlikely.
California red-legged frog	<i>Rana draytonii</i>	Federal Threatened CDFW Species of Special Concern	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and	Unlikely. No aquatic breeding or non-breeding habitat is present within the Study Area. The nearest documented occurrence for this species is 0.5 miles northeast of the Study Area in association with a quarry pond. Highway 29

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
red-bellied newt	<i>Taricha rivularis</i>	CDFW Species of Special Concern	<p>wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.</p> <p>Inhabits coastal forests from southern Sonoma County northward, with an isolated population in Santa Clara County. Redwood forest provides typical habitat, though other forest types (e.g., hardwood) are also occupied. Adults are terrestrial and fossorial. Breeding occurs in streams, usually with relatively strong flow.</p>	<p>separates the Study Area and this occurrence. Therefore, given the lack of suitable habitat in the Study Area and the barrier to dispersal, dispersal into the Study Area is unlikely. No potential. No redwood forests or aquatic breeding habitat is present within the Study Area.</p>
Birds				
tricolored blackbird	<i>Agelaius tricolor</i>	California Threatened CDFW Species of Special Concern	<p>Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas is essential.</p> <p>Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and</p>	<p>Unlikely. The nearest documented occurrence for this species is 3.6 miles northeast of the Study Area; however, no emergent vegetation or riparian thickets for nesting are present within the Study Area.</p> <p>No potential. No cliffs or large trees for nesting are</p>
golden eagle	<i>Aquila chrysaetos</i>	CDFW Fully Protected		

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
burrowing owl	<i>Athene cunicularia</i>	CDFW Species of Special Concern	<p>deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas. Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.</p>	<p>present within the Study Area.</p>
Swainson's hawk	<i>Buteo swainsoni</i>	California Threatened	<p>Summer resident in California's Central Valley and limited portions of the southern California interior. Nests in tree groves and isolated trees in riparian and agricultural areas, including near buildings. Forages in grasslands and scrub habitats as well as agricultural fields, especially alfalfa. Preys on arthropods year-round as well as smaller vertebrates during the breeding season.</p>	<p>Unlikely. The nearest documented occurrence for this species is 1.45 miles south of the Study Area. However, the Study Area does not contain ground squirrel burrows and therefore does not provide suitable nesting or wintering habitat for this species. No potential. A small population of breeding Swainson's hawk has been documented in Napa, approximately 3 miles north of the Study Area. This species has not been documented breeding in American Canyon. In addition, the Study Area does not contain suitable nesting trees for this species. The Study Area is surrounded by dense development and provides limited opportunities for foraging.</p>

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
northern harrier	<i>Circus hudsonius</i>	CDFW Species of Special Concern	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	Unlikely. Suitable nesting habitat is not present within the Study Area. The Study Area is regularly mowed, and is surrounded by dense development, reducing potential to support foraging.
yellow rail	<i>Coturnicops noveboracensis</i>	CDFW Species of Special Concern	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state. Extremely cryptic.	No potential. No suitable habitat for this species is present within the Study Area. The Study Area is outside of this species nesting range.
black swift	<i>Cypseloides niger</i>	CDFW Species of Special Concern	Summer resident with a fragmented breeding distribution; most occupied areas in California either montane or coastal. Breeds in small colonies on cliffs behind or adjacent to waterfalls, in deep canyons, and sea-bluffs above surf. Forages aerially over wide areas.	No potential. No cliffs, canyons, or aquatic features are present within the Study Area.
white-tailed kite	<i>Elanus leucurus</i>	CDFW Fully Protected	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of	Unlikely. This species is unlikely to nest in the Study Area due to the high level of anthropogenic disturbance including

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
American peregrine falcon	<i>Falco peregrinus anatum</i>	Federal Delisted California Delisted CDFW Fully Protected	<p>which the type and setting are highly variable. Preys on small mammals and other vertebrates.</p> <p>Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on man-made structures including buildings and bridges. Preys on birds, especially waterbirds. Forages widely.</p>	<p>Highway 29. The Study Area is regularly mowed, and is surrounded by dense development, reducing potential to support foraging</p> <p>No potential. No protected cliffs or suitable man-made structures for nesting are present within the Study Area.</p>
saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	CDFW Species of Special Concern	<p>Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.</p>	<p>No potential. The nearest documented occurrence for this species is 2.37 miles south of the Study Area in associated with salt marsh habitat. The Study Area does not contain dense vegetation or suitable nesting habitat for this species.</p>
California black rail	<i>Laterallus jamaicensis coturniculus</i>	California Threatened CDFW Fully Protected	<p>Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an</p>	<p>No Potential. No marshes are present within the Study Area.</p>

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
Suisun song sparrow	<i>Melospiza melodia maxillaris</i>	CDFW Species of Special Concern	extensive upper zone and are close to a major water source. Extremely secretive and cryptic. Year-round resident of brackish-water marshes along Suisun Bay. Inhabits cattails, tules, bulrushes and other emergent vegetation, including pickleweed. Nests typically placed in shrubs.	No Potential. No marshes are present within the Study Area.
San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	CDFW Species of Special Concern	Year-round resident of tidal marshes along the north side of San Francisco and San Pablo Bays. Typical habitat is dominated by pickleweed, with gumplant and other shrubs present in the upper zone for nesting. May forage in areas adjacent to marshes.	No Potential. No marshes or are present within the Study Area.
California Ridgway's rail	<i>Rallus obsoletus obsoletus</i>	Federal Endangered California Endangered CDFW Fully Protected	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on molluscs and crustaceans.	No Potential. No tidal sloughs or intertidal mudflats are present within the Study Area.
bank swallow	<i>Riparia riparia</i>	California Threatened	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California.	No potential. No riparian habitat, vertical cliffs, or bank cuts are present within the Study Area.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	CDFW Species of Special Concern	<p>Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.</p> <p>Summer resident. Breeds colonially in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Requires abundant large insects such as dragonflies; nesting is timed for maximum emergence of insect prey.</p>	No potential. No freshwater wetlands or other aquatic features are present within the Study Area.
Fish				
Delta smelt	<i>Hypomesus transpacificus</i>	Federal Threatened California Endangered	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	No Potential. No aquatic habitat is present within the Study Area.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
steelhead - central California coast DPS	<i>Oncorhynchus mykiss irideus</i> pop. 8	Federal Threatened	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	No Potential. No aquatic habitat is present within the Study Area.
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	CDFW Species of Special Concern	Formerly endemic to the lakes and rivers of the Central Valley, but now confined to the Sacramento Delta, Suisun Bay and associated marshes. Occurs in slow-moving river sections and dead-end sloughs. Requires flooded vegetation for spawning and foraging for young. A freshwater species, but tolerant of moderate salinity (10-18 parts per thousand).	No Potential. No aquatic habitat is present within the Study Area.
longfin smelt	<i>Spirinchus thaleichthys</i>	Federal Candidate California Threatened	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	No Potential. No aquatic habitat is present within the Study Area.
Invertebrates				
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Federal Threatened	Endemic to the grasslands of the Central Valley, central	No Potential. No aquatic habitat is present within

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
California freshwater shrimp	<i>Syncaris pacifica</i>	Federal Endangered California Endangered	coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main stream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	the Study Area. No Potential. No aquatic habitat is present within the Study Area.
western bumble bee	<i>Bombus occidentalis</i>	California Candidate Endangered	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	No potential. The Study Area is outside of this species known current distribution. There are no recent documented occurrences of this species in the vicinity of the Study Area.
valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Federal Threatened	Occurs only in the central valley of California, in association with blue elderberry (<i>Sambucus</i> spp.). Prefers to lay eggs in	No Potential. The Study Area is outside of this species range. In addition, the host plant (blue

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	Federal Endangered	elderberry 2 to 8 inches in diameter; some preference shown for "stressed" elderberry. Two populations in San Bruno mountain and the Cordelia Hills are recognized. Hostplant is <i>Viola pedunculata</i> , which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	elderberry) is not present in the Study Area. No potential. A known population exists in the Cordelia Hills, approximately 4 miles southeast of the Study Area. The Study Area does not contain serpentine soils or <i>Viola pedunculata</i> to support this species.
Mammals				
pallid bat	<i>Antrozous pallidus</i>	CDFW Species of Special Concern WBWG High Priority	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and also hollow trees and various man made structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No potential. No rock outcrops, cliffs, caves, mines, or hollow trees are present within the Study Area.
big free-tailed bat	<i>Nyctinomops macrotis</i>	CDFW Species of Special Concern WBWG Medium-High Priority	Occurs rarely in low-lying arid areas. Requires high cliffs or rocky outcrops for roosting sites.	No potential. No high cliffs or rocky outcrops are present within the Study Area.

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
salt-marsh harvest mouse	<i>Reithrodontomys raviventris</i>	Federal Endangered California Endangered CDFW Fully Protected	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	No potential. No marsh wetlands are present within the Study Area.
Suisun shrew	<i>Sorex ornatus sinuosus</i>	CDFW Species of Special Concern	Tidal marshes of the northern shores of San Pablo and Suisun Bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.	No potential. No tidal marshes or dense ground cover is present within the Study Area. The nearest occurrence is approximately 3 miles southwest, however several residential and commercial developments separate the Study Area and this occurrence. Therefore, dispersal into the Study Area is unlikely.
American badger	<i>Taxidea taxus</i>	CDFW Species of Special Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	No potential. No suitably sized mammal burrows were observed within the Study Area. The Study Area is subject to a high level of anthropogenic disturbance. The nearest occurrence is approximately 6.5 miles north of the Study Area

APPENDIX C. SPECIAL-STATUS SPECIES ASSESSMENT TABLE - WILDLIFE

COMMON NAME	SCIENTIFIC NAME	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA
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Appendix E – Cultural Resources Study

**Cultural Resources Study for the
Napa Cove Apartments Project
American Canyon, Napa County, California**

Eileen Barrow, MA/RPA

September 9, 2021



**Cultural Resources Study for the
Napa Cove Apartments Project
American Canyon, Napa County, California**

Prepared by:

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San Diego, CA 92117

September 9, 2021

ABSTRACT

Tom Origer & Associates conducted a cultural resources study for the Napa Cove Apartments Project, American Canyon, Napa County, California. The study was requested by Shady Fayed and authorized by Rick Serrapica, of CRP Affordable Housing and Community Development. This study was conducted to meet the requirements of Section 106 of the National Historic Preservation Act and the United States Department of Housing and Urban Development, and the California Environmental Quality Act, and the City of American Canyon. The purpose of this report is to identify resources that could be eligible for inclusion on the National Register of Historic Places, as outlined in 36 CFR 800, and to identify potential historical resources other than Tribal Cultural Resources, as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B) and discussed in the Regulatory Context section). Tribal Cultural Resources are defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B).

The proposed project encompasses three parcels: APNs 058-362-005, 058-362-016, and 058-362-021 located at 3805 Broadway, and involves the development of the property into 66 apartment units and associated infrastructure.

This study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the Area of Potential Effects. No historic properties were found within the Area of Potential Effects. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2021-082).

Synopsis

Project: Napa Cove Apartments
Location: 3805 Broadway, American Canyon, Napa County
APN: 058-362-005, 058-362-016, and 058-362-021
Quadrangles: Cuttings Wharf 7.5' series
Study Type: Intensive
Scope: 3.6 acres
Field Hours: 1.5 person-hours
NWIC #: 21-0231
TOA #: 2021-082
Finds: No historic properties were found within the Area of Potential Effects.

Key Personnel

Eileen Barrow provided project oversight, conducted the records search at the Northwest Information Center, and authored the report for this project. Mrs. Barrow has been with Tom Origer & Associates since 2005. She holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for American Archaeology, the Society for California Archaeology, the Cotati Historical Society, the Sonoma County Historical Society, the Western Obsidian Focus Group, and the Register of Professional Archaeologists (#989269).

Julia Karnowski conducted the records search at the Northwest Information Center for this project. Ms. Karnowski holds a Bachelor of Science in Anthropology from California State Polytechnic University, Pomona, with graduate studies at Sonoma State University. She is affiliated with the Society for California Archaeology, the Society for American Archaeology, and the Society for Historical Archaeology.

Taylor Alshuth conducted the fieldwork for this study. Mr. Alshuth obtained a Bachelor of Arts degree in Anthropology from Humboldt State University in 2014, after obtaining an Associate of Arts degree in Anthropology at Santa Rosa Junior College in 2012. He has been affiliated with the Society for California Archaeology, the Archaeological Institute of America, and the Archaeological Conservancy. Mr. Alshuth has been a part of northern California archaeology since 2014.

Janine Origer provided her architectural history expertise for this project. Ms. Origer has 30 years' experience in Northern California cultural resources management. She has been with Tom Origer & Associates since 1991. She has worked on both prehistoric and historical archaeological sites and has completed research and documentation of historical buildings. Ms. Origer has a Bachelor of Arts in Anthropology from Sonoma State University. She holds a Master of Arts in Archaeology and Heritage from the University of Leicester. She has completed extensive continuing education in regulatory compliance, planning local surveys, and identifying historical resources. She is affiliated with the American Historical Association, Society for California Archaeology (Secretary of the Executive Board 2004-2006), the International Association for Obsidian Studies, the Society for American Archaeology, the Society for Historical Archaeology, Society of Architectural Historians, Vernacular Architecture Forum, and the Register of Professional Archaeologists (#1066030).

CONTENTS

ABSTRACT i
 Synopsis..... i
 Key Personnel.....ii
INTRODUCTION 1
REGULATORY CONTEXT..... 1
 Resource Definitions 2
 Significance Criteria..... 2
PROJECT SETTING 3
 Area of Potential Effects Location and Description 3
 Cultural Setting..... 6
STUDY PROCEDURES AND FINDINGS 10
 Native American Contact 10
 Native American Contact Results..... 10
 Archival Research Procedures 11
 Archival Research Findings..... 11
 Field Survey Procedures 12
 Field Survey Findings..... 12
DISCUSSION AND RECOMMENDATIONS 13
 Archaeological Recommendations 14
 Built Environment Recommendations..... 14
 Accidental Discovery 14
SUMMARY..... 14
MATERIALS CONSULTED..... 16

APPENDIX A: Native American Contact

APPENDIX B: Photographs

FIGURES

Figure 1. Project vicinity 1
Figure 2. Area of Potential Effects location..... 4
Figure 3. Overview photo of the Area of Potential Effects, facing northeast..... 5
Figure 4. Archaeological APE (outlined in red) and parcels included in architectural APE (outlined in blue). 6

TABLES

Table 1. North Bay/San Francisco Bay Area Chronology..... 8
Table 2. Studies within a Quarter-mile of the Area of Potential Effects 12
Table 3. Resources within a Quarter-mile of the Area of Potential Effects..... 12
Table 4. List of Parcels Examined 13

INTRODUCTION

This report describes a cultural resources study for the Napa Cove Apartments Project, American Canyon, Napa County, California (Figure 1). The study was requested by Shady Fayed and authorized by Rick Serrapica, of CRP Affordable Housing and Community Development. The project proponent has applied for federal funds to build affordable housing within the Area of Potential Effects (APE); therefore, this project is subject to Section 106 of the National Historic Preservation Act (Section 106) and the United States Department of Housing and Urban Development, and the California Environmental Quality Act (CEQA) and the City of American Canyon. The proposed project consists of the development of 3.6 acres into 66 apartment units and related infrastructure. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2021-082S).

REGULATORY CONTEXT

Under Section 106, when a federal agency is involved in an undertaking, it must take into account the effects of the undertaking on historic properties (36CFR Part 800). Compliance with Section 106 requires that agencies make an effort to identify historic properties that might be affected by a project.

The State of California requires that cultural resources be considered during the environmental review process. This process is outlined in CEQA and accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term “Historical Resources” encompasses all forms of cultural resources including prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals), that would be eligible for inclusion on the California Register of Historical Resources (California Register).

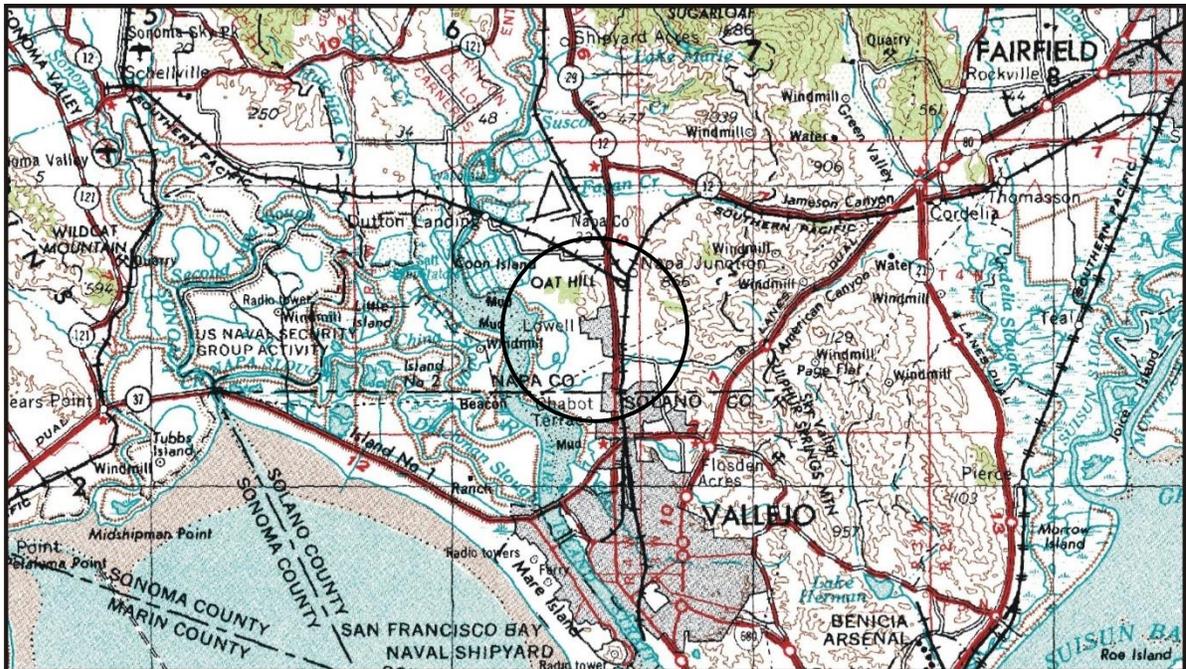


Figure 1. Project vicinity (adapted from the 1980 Santa Rosa 1:250,000-scale USGS map).

An additional category of resources is defined in CEQA under the term “Tribal Cultural Resources” (Public Resources Code Section 21074). They are not addressed in this report because Tribal Cultural Resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to CEQA, as revised in July 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

The term, cultural resources, will be used in this report to describe historical resources under CEQA and cultural resources under Section 106.

Pursuant to Section 106 and the CEQA Guidelines, the goals of this study were to 1) identify cultural resources within the project’s APE; 2) provide an evaluation of the significance of identified resources; 3) determine resource vulnerability to adverse impacts that could arise from project activities; and 4) offer recommendations designed to protect cultural resource values, as warranted.

Resource Definitions

The National Register of Historic Places (National Register) defines a historic property as a district, site, building, structure, or object significant in American history, architecture, engineering, archaeology, and culture, and that may be of value to the nation as a whole or important only to the community in which it is located. The National Park Service (NPS) describes these resources as follows (NPS 1995:4-5).

Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

Building. A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.

Structure. The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Object. The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

District. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. For purposes of the National Register,

the importance of a resource is evaluated in terms of criteria put forth in 36CFR60 (see below). Eligibility criteria for the California Register (Title 14 CCR, §4852) are very similar and will not be presented here.

The quality of significance is present in properties that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, eligibility for both the California Register and the National Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Area of Potential Effects Location and Description

The APE lies on the open plain between the Napa River to the west and Sulphur Springs Mountain to the east. The APE is located at 3805 Broadway, American Canyon, Napa County, as shown on the Cuttings Wharf 7.5' USGS topographic map (Figure 2). Figure 3 provides a current overview of the APE which is comprised of vacant land. The architectural APE includes parcels that immediately surround the APE, with Highway 29 (also referred to as Broadway) comprising the eastern boundary (Figure 4).

The APE consists of 3.6 acres situated on generally level land with a percent slope of 1%. The closest water source is an unnamed drainage, approximately 385 meters northwest of the APE.

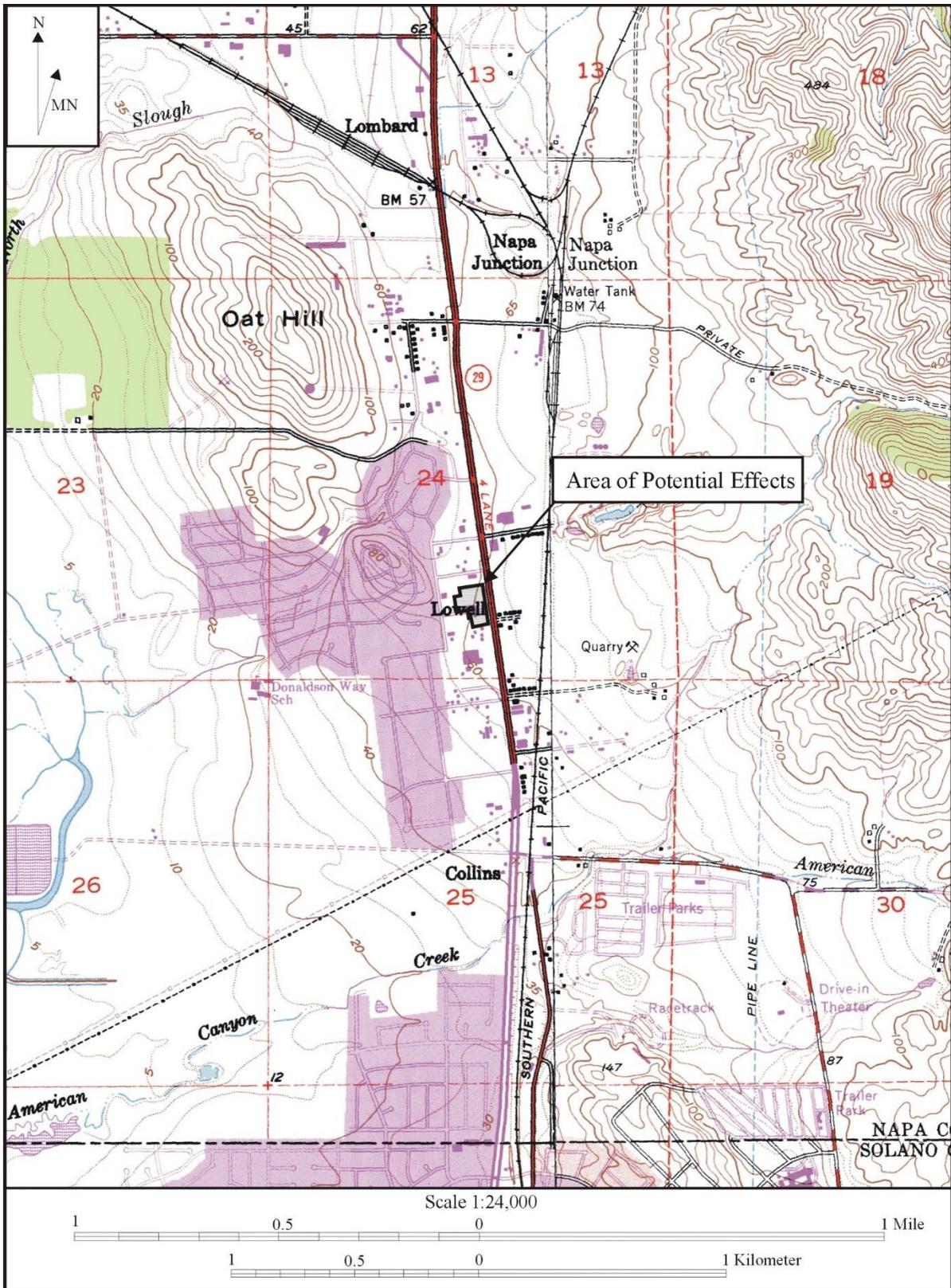


Figure 2. Area of Potential Effects location (adapted from the 1980 Cordelia and the 1981 Cuttings Wharf 7.5' USGS topographic maps).



Figure 3. Overview photo of the Area of Potential Effects, facing northeast.

The geology of the APE consists of alluvial fan deposits that date from the latest Pleistocene through the Holocene epoch (30,000 years ago to present) (Bezore *et al.* 2002; Wagner and Gutierrez 2017).

Soils within the APE belong to the Clear Lake series (Lambert and Kashawagi 1978: Sheet 47). Clear Lake soils are poorly-draining clays found on old alluvial fans and in basins. In a natural state, these soils support the growth of grasses, forbs, and scattered oaks. Historically, parcels containing Clear Lake soils were used mainly for pasture with some areas used to grow tomatoes and vineyards (Lambert and Kashiwagi 1978:11 and 12).



Figure 4. Archaeological APE (outlined in red) and parcels included in architectural APE (outlined in blue).

Cultural Setting

Prehistory

The concept of prehistory refers to the period of time before events were recorded in writing and vary worldwide. Because there is no written record, our understanding of California prehistory relies on archaeological materials and oral histories passed down through generations. Early archaeological research in this area began with the work of Max Uhle and Nels Nelson. Uhle is credited with the first scientific excavation in California with his work at the Emeryville Shellmound in 1902, and Nelson spent several years (1906 to 1908) surveying the San Francisco Bay margins and California coast for archaeological sites (Nelson 1909). In the 1930s, archaeologists from Sacramento Junior College and the University of California began piecing together a sequence of cultures primarily based on burial patterns and ornamental artifacts from sites in the lower Sacramento Valley (Lillard *et al.* 1939; Heizer and Fenenga 1939). Their cultural sequence became known as the Central California Taxonomic System (CCTS), which identified three culture periods termed the Early, Middle, and Late Horizons, but without offering date ranges. Refinement of the CCTS became a chief concern of archaeologists as

the century progressed with publications by Richard Beardsley (1948, 1954) and Clement Meighan (1955) based on materials excavated by the University of California archaeological survey.

In 1973, David Fredrickson synthesized prior work, and in combination with his own research, he developed a regional chronology that is used to this day, albeit modified for locality-specific circumstances. Fredrickson's scheme shows that native peoples have occupied the region for over 11,000 years (which is supported by Erlandson *et al.* 2007), and during that time, shifts took place in their social, political, and ideological regimes (Fredrickson 1973). While Fredrickson's chronology was adopted by many archaeologists, Beardsley's cultural sequence was adopted by others creating a roughly North Bay-South Bay division in usage.

In 1960, the first study of obsidian hydration as a dating tool for archaeologists was published (Friedman and Smith 1960). This study showed that the chemical composition of the obsidian and temperature affect the hydration process. It was not until the 1980s that research into this dating method was conducted for the North Bay Area which has four major obsidian sources. In 1987, Thomas Origer devised a hydration chronology for the North Bay Area (Origer 1987b). This chronology was developed by pairing micron readings taken from obsidian specimens and pairing them with radiocarbon-dated artifacts and features. Origer was able to develop a hydration rate for Annadel and Napa Valley obsidian sources as a result of his study. Later, Tremaine (1989, 1993) was able to develop comparison constants among the four primary obsidian sources in the North Bay Area. The concept of comparison constants allows for the calculation of dates from hydration band measurements taken from obsidian specimens from sources with unknown hydration rates.

The development of obsidian hydration rates for the four, primary north Bay Area obsidian sources have provided archaeologists the ability to obtain dates from sites that could not previously be dated due to lack of diagnostic artifacts or organic material suitable for radiocarbon dating. Origer was able to support and refine Fredrickson's chronology dating tools diagnostic of certain periods (Origer 1987b).

In an effort to bridge the differences between chronologies, Milliken *et al.* (2007: Figure 8.4) presented a concordance for comparing time periods, cultural patterns, and local variations for the San Francisco Bay Area. Milliken included Dating Scheme D, as presented by Groza in 2002, which is a refinement of previous radiocarbon-based temporal sequences for the San Francisco Bay Area. More recently, Byrd, Whitaker, Mikkelsen, and Rosenthal (2017) called upon archaeologists to abandon previous temporal sequences in favor of Scheme D, further refined in Groza *et al.* 2011. Table 1 assimilates Scheme D, Fredrickson's (1973) chronology, and the obsidian hydration dating scheme from Origer (1987). Note that the Early, Middle, Late Horizon scheme is still evident though refinements have been made within those categories.

Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

Table 1. North Bay/San Francisco Bay Area Chronology

Temporal Period¹	Approximate Time Range¹	~ Hydration Interval (μ)₂	Scheme D Periods³	Approximate Time Range³	~ Hydration Interval (μ)₂
Historical	< AD 1800	<1.20	Historic Mission	AD 1835 to AD 1770	1.10 - 1.27
Upper Emergent	AD 1800 to AD 1500	1.21 - 1.84	Late 2	AD 1770 to AD 1520	1.28 - 1.80
Lower Emergent	AD 1500 to AD 1000	1.85 - 2.58	Late 1b	AD 1520 to AD 1390	1.81 - 2.02
			Late 1a	AD 1390 to AD 1265	2.03 - 2.22
			Middle/Late Transition	AD 1265 to AD 1020	2.23 - 2.55
Upper Archaic	AD 1000 to 500 BC	2.59 - 4.05	Middle 4	AD 1020 to AD 750	2.56 - 2.88
			Middle 3	AD 750 to AD 585	2.89 - 3.06
			Middle 2	AD 585 to AD 420	3.07 - 3.23
			Middle 1	AD 420 to 200 BC	3.24 - 3.80
Middle Archaic	500 BC to 3000 BC	4.06 - 5.72	Early/Middle Transition	200 BC to 600 BC	3.81 - 4.13
			Early	600 BC to 2100 BC	4.14 - 5.18
Lower Archaic	3000 BC to 6000 BC	5.73 - 7.23			
Paleo-Indian	6000 BC to 8000 BC	7.24 - 8.08+			

μ = microns

¹ based on Fredrickson (1994)

² based on Napa Glass Mountain rate by Origer (1987b) and Effective Hydration Temperature value from the vicinity of Santa Rosa, Sonoma County

³ based on Groza *et al.* (2011)

These horizons or periods are marked by a transition from large projectile points and milling slabs, indicating a focus on hunting and gathering during the Early Period, to a marine focus during the Middle Period evidenced by the number of shellmounds in the Bay Area. The Middle Period also saw more reliance on acorns and the use of bowl-shaped mortars and pestles. Acorn exploitation increased during the Late Period and the bow and arrow were introduced.

Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire-affected stones.

Ethnography

Linguists and ethnographers tracing the evolution of languages have found that most of the indigenous languages of the California region belong to one of five widespread North American language groups (the Hokan and Penutian phyla, and the Uto-Aztecan, Alaic, and Athabaskan language families). The distribution and internal diversity of four of these groups suggest that their original centers of dispersal were outside, or peripheral to, the core territory of California, that is, the Central Valley, the Sierra Nevada, the Coast Range from Cape Mendocino to Point Conception, and the Southern California coast and islands. Only languages of the Hokan phylum can plausibly be traced back to populations inhabiting parts of this core region during the Archaic period, and there are hints of connections between certain branches of Hokan, such as that between Salinan and Seri, that suggest that at least some of the Hokan languages could have been brought into California by later immigrants, primarily from the Southwest and northwestern Mexico (Golla 2011).

The APE is situated in an area controlled by the Patwin at the time of Euro-American settlement (Barrett 1908; Johnson 1978; Kroeber 1925, 1932). Linguistic evidence indicates that the Patwin were speakers of a Penutian language (Wintun). The Patwin were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925, 1932; Johnson 1978). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant and animal life was diverse and abundant.

History

The APE is located within section 24 of township 4 north, range 4 west of the Mount Diablo meridian of public lands. The land transaction history for this area is interesting in that the lands were once part of Rancho Suscol (Soscol) granted to Mariano Guadalupe Vallejo in 1843. Like much of California, when the land became part of the United States of America, there were legal battles regarding ownership of thousands of acres of land.

Vallejo had sold Rancho Suscol to John Frisbie who in turn sold large tracts of the rancho to various buyers. In 1862, rumors swirled that Vallejo's claim to the Rancho Suscol would be rejected by the United States government, thus voiding the subsequent sales of this rancho to others. Although this rumor was denied, Frisbee and others asked Representative Timothy G. Phelps to introduce a bill that would enable those who had purchased land from discredited Mexican claimants to repurchase their land from the United States government at a price of \$1.25 per acre (Gates 1970:456). This bill was countered by proposals to limit acreage to 160 acres and to purchase the land at its true value (Gates 1970:457).

Phelps' bill failed in 1862, but in 1863 the Suscol bill was approved and the Suscol Act allowed those who had purchased Rancho Suscol land to repurchase the land they were in possession of at "the time of ...adjudication" of the claim (Gates 1970:461). The Suscol Act was met with mixed results. Original purchasers of portions of the Rancho Suscol were happy because lands they had purchased would either be returned to them or remain in their possession. People who had flooded to the rancho when its ownership was under question were now illegal squatters. Legal battles went on for months after the Suscol Act but many cases sided with the original purchasers from Frisbie (Gates 1970:463).

The APE is located in a tract of land of which John Frisbie retained at least partial ownership. Edward Frisbie, C.J. Mosley, Isaac Rutan, and J.B. Thomas are also listed as owners of the large tract of land (BLM 2021).

Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

STUDY PROCEDURES AND FINDINGS

Native American Contact

A request was sent to the State of California's Native American Heritage Commission (NAHC) seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Letters were also sent to the following groups:

- Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
- Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
- Guidiville Band of Pomo Indians
- Middletown Rancheria of Pomo Indians of California
- Mishewal-Wappo Tribe of Alexander Valley
- Pinoleville Pomo Nation
- Yocha Dehe Wintun Nation

This contact does not constitute consultation with tribes.

Native American Contact Results

The NAHC replied with a letter dated September 9, 2021, indicating that a search of the Sacred Lands File showed there are no cultural resources within the township and range of the APE. A list of additional contacts was provided.

Leland Kinter, Tribal Historic Preservation Officer for the Yocha Dehe Wintun Nation responded with a letter dated August 24, 2021. Mr. Kinter stated that the project site is within their aboriginal territories and they have a cultural interest in the project. They requested a copy of our report and project plans. In addition, they included a copy of their burial treatment protocol and would like them included in any mitigation measures prepared for this project.

No other responses have been received as of the date of this report. A log of contact efforts is appended, along with copies of correspondence (see Appendix A).

Archival Research Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. This research is meant to assess the potential to encounter archaeological sites and built environment within the study area. Research was also completed to determine the potential for buried archaeological deposits.

A review (NWIC File No. 21-0231) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park by Julia Karnowski on August 11, 2021. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the OHP’s *Historic Property Directory* (2012) and the *Built Environment Resources Directory* (2021).

The OHP has determined that structures in excess of 45 years of age could be important historical resources, and former building and structure locations could be important archaeological sites. Archival research included an examination of 19th and 20th-century maps and aerial photographs to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area.

Ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the “Materials Consulted” section of this report.

A model for predicting a location’s sensitivity for buried archaeological sites was formulated by Byrd *et al.* (2017) based on the age of the landform, slope, and proximity to water. A location is considered to have the highest sensitivity if the landform dates to the Holocene, has a slope of five percent or less, is within 150 meters of fresh water, and 150 meters of a confluence. Note, the Holocene Epoch is the current period of geologic time, which began about 11,700 years ago, and coincides with the emergence of human occupation of the area. A basic premise of the model is that archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model (Byrd *et al.* 2017:Tables 11 and 12), a location’s sensitivity is scored on a scale of 1 to 10 and classed as follows: lowest (<1); low (1-3); moderate (3-5.5); high (5.5-7.5); highest (>7.5). Incorporating King’s (2004) analysis of buried site potential, the probability of encountering buried archaeological deposits for each class is as follows:

<u>Sensitivity Score</u> ¹	<u>Classification</u> ¹	<u>Probability</u> ²
<1	Lowest	<1 %
1-3	Low	1-2 %
3-5.5	Moderate	2-3%
5.5-7.5	High	3-5%
>7.5	Highest	5-20%

¹ Byrd *et al.* 2017

² King 2004

Archival Research Findings

Examination of the base maps at the NWIC shows that the APE has been previously surveyed; however, examination of the report shows that the study was conducted on the east side of Highway 29 from the

APE and so it was misplotted on the base maps (Brewster *et al.* 2015). Four studies have been conducted within a quarter-mile of the APE (Table 2). Nine cultural resources have been recorded within a quarter-mile of the APE (Table 3). All of the resources are buildings and do not have the potential to extend into the APE.

No ethnographic villages are reported within one mile of the APE (Barrett 1908; Bennyhoff 1977; Johnson 1978; Kroeber 1925, 1932).

A review of 19th and 20th-century maps and aerial photos shows no buildings within the APE until 1957 (Buckman 1895; GLO 1863, 1923; Lyman and Throckmorton 1876; UCSB 1937, 1957; USACE 1946, 1948; USGS 1902, 1951). Subsequent aerial photos show that all of the buildings within the APE were demolished by 2006).

Table 2. Studies within a Quarter-mile of the Area of Potential Effects

Author	Date	S#
Brewster <i>et al.</i>	2015	46321
Flynn	1988	24344
Jablonowski <i>et al.</i>	1996	18016
Nelson and Carpenter	2000	22817

Table 3. Resources within a Quarter-mile of the Area of Potential Effects

Author	Date	Designation	Distance from Study Area
Brewster	2015a	P-28-001819	1,185 feet
Brewster	2015b	P-28-001827	870 feet
Brewster	2015c	P-28-001828	710 feet
Brewster	2015d	P-28-001829	745 feet
Brewster	2015e	P-28-001830	825 feet
Brewster	2015f	P-28-001831	870 feet
Brewster	2015g	P-28-001832	925 feet
Brewster	2015h	P-28-001833	1,005 feet
Brewster	2015i	P-28-001834	510 feet

Based on landform age, our analysis of the environmental setting, and incorporating the Byrd *et al.* (2017) analysis of sensitivity for buried sites, there is a moderate potential (3.3) for buried archaeological site indicators within the APE.

Field Survey Procedures

An intensive field survey was completed by Taylor Alshuth on August 24, 2021. One and one-half hours were spent in the field and field conditions warm and sunny. Surface examination consisted of walking in 15-meter transects when possible, and a hoe was used as needed to expose the ground surface. Ground visibility ranged from excellent to poor, with vegetation and imported gravels being the primary hindrances.

Field Survey Findings

Archaeology

No archaeological site indicators were observed during the course of the survey.

Built Environment

The architectural APE consists of three project parcels, six surrounding parcels, with Highway 29 (also referred to as Broadway) comprising the eastern side of the architectural APE. A description of the parcels that comprise the architectural APE are listed in Table 4, with a map number that corresponds to the parcel location as shown in Figure 4. Appendix B contains photos of the buildings examined for this study.

Table 4. List of Parcels Examined

Map #	Address	APN	Description	Year
A	No address	058-362-005	Vacant	
B	3805 Broadway	058-362-021	Vacant	
C	No address	058-362-016	Vacant	
1	No address	058-362-003	Vacant	
2	33 Melvin Road	058-362-004	Single-family Residence	1953
3	No address	058-362-020	Vacant	
4	19 Melvin Road	058-362-015	Melvin Park	
5	15 Melvin Road	058-362-017	Napa County Mosquito Abatement District	Post-1982
6	3665 Broadway	058-362-010	Single-family Residence	Post-1948

The majority of the architectural APE is vacant. Only two properties warrant discussion as they contain buildings constructed over 50 years ago, Map number 2 and Map number 6. The buildings on these two parcels are described below.

Map number 2

The house at 33 Melvin Road was constructed in 1953, according to County records. This house consists of a wood-framed, single-story building on a rectangular plan. There is an addition on the north side of the building. The roof of the addition is hipped and the roof of the original part of the building is side-gabled and consists of composite shingles. The building is clad in stucco. The windows all have vinyl sashes and are a combination of vertical sliders and single-pane fixed.

There is a small building behind the house, possibly a granny unit. This building is a wood-framed single-story building on a square plan. It is also clad in stucco and has a hipped roof of composite shingles. There are also two small sheds and a small greenhouse in the backyard of the property.

Map number 6

The house at 3665 Broadway was constructed after 1948 according to review of aerial photos (UCSB 1948 1957). The house is a wood-framed two-story building on a rectangular plan. It appears to be a duplex with one unit upstairs and one unit downstairs. The roof is side-gabled and consists of composite shingles. There is an addition along the rear (west) side of the building that extends north off of the building. There is also an addition off this addition (west). The building appears to be clad in lap siding. There are several window types in the building. On the front (east) of the building is a gabled porch that serves as both a cover to the downstairs front door and cover and access to the top unit. There are two small sheds in the backyard of the property.

DISCUSSION AND RECOMMENDATIONS

No archaeological site indicators were found within the APE. Application of the buried sites model indicates a moderate potential for buried resources.

Janine Origer of Tom Origer & Associates meets the Secretary of the Interior's Standards for architectural history and provided the following opinion with regard to the built environment. There is no evidence that the houses within the APE are associated with an historical context important to Napa County, such as agriculture or post-World War II development; therefore, they do not meet criterion A of the National Register (or criterion 1 of the California Register). The houses are unlikely to be associated with people important to local, state, or national history; therefore, they would not meet criterion B of the National Register (or criteria 2 of the California Register). All of the buildings within the architectural APE are architecturally indistinctive and would not meet criterion C of the National Register (criterion 3 of the California Register). Buildings do not generally contain data that meet criterion D of the National Register (criterion 4 of the California Register).

Archaeological Recommendations

No recommendations are warranted.

Built Environment Recommendations

Given the buildings within the architectural APE do not meet criteria for inclusion on the National or California registers, no recommendations for their treatment are warranted.

Accidental Discovery

If buried materials are encountered, all soil disturbing work should be halted at the location of any discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36CFR60.4). Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements that look like fist-size, river-tumbled stones; and for some rare sites, locally darkened soil that generally contains abundant archaeological specimens. Historical remains expected in the general area commonly include items of ceramic, glass, and metal. Features that might be present include structure remains (e.g., cabins or their foundations) and pits containing historical artifacts.

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the NAHC. The NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed a cultural resources study for the Napa Cove Apartments Project, American Canyon, Napa County, California. The study was requested by Shady Fayed and authorized by Rick Serrapica, of CRP Affordable Housing and Community Development. This project is subject to the requirements of both Section 106 and CEQA. No historic properties were identified during this

study; therefore, no recommendations are required. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2021-082S).

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APPENDIX A

Native American Contact

Copies of Correspondence

**Native American Contact Efforts
Napa Cove Apartments Project
American Canyon, Napa County**

Organization	Contact	Action	Results
Native American Heritage Commission		Email 8/5/21	The NAHC replied with a letter dated September 9, 2021, indicating that a search of the Sacred Lands File showed there are no cultural resources within the township and range of the APE. A list of additional contacts was provided.
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	Daniel Gomez Clifford Mota	Email 8/16/21	No response received as of the date of this report.
Cortina Rancheria – Kletsel Dehe Band of Wintun Indians	Charlie Wright	Letter 8/16/21	No response received as of the date of this report.
Guidiville Band of Pomo Indians	Donald Duncan	Email 8/16/21	No response received as of the date of this report.
Middletown Rancheria of Pomo Indians of California	Jose Simon, III Michael Rivera	Email 8/16/21	No response received as of the date of this report.
Mishewal-Wappo Tribe of Alexander Valley	Scott Gabaldon	Email 8/16/21	No response received as of the date of this report.
Pinoleville Pomo Nation	Erica Carson Leona Williams	Email 8/16/21	No response received as of the date of this report.
Yocha Dehe Wintun Nation	Laverne Bill Leland Kinter Anthony Roberts	Email 8/16/21	Leland Kinter, Tribal Historic Preservation Officer for the Yocha Dehe Wintun Nation responded with a letter dated August 24, 2021. Mr. Kinter stated that the project site is within their aboriginal territories and they have a cultural interest in the project. They requested a copy of our report and project plans. In addition, they included a copy of their burial treatment protocol and would like them included in any mitigation measures prepared for this project.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Napa Cove Apartments
County: Napa

USGS Quadrangles
Name: Cuttings Wharf
Township T4N Range R4W Section(s) 24 MDBM

Date: August 5, 2021
Company/Firm/Agency: Tom Origer & Associates
Contact Person: Eileen Barrow

Address: P.O. Box 1531
City: Rohnert Park Zip: 94927
Phone: (707) 584-8200 Fax: (707) 584-8300
Email: eileen@origer.com

Project Description: The project proponent is seeking to develop the property at 3805 Broadway, American Canyon into low-income housing.

CHAIRPERSON
Laura Miranda
Luiseno

NATIVE AMERICAN HERITAGE COMMISSION

VICE CHAIRPERSON
Reginald Pagaling
Chumash

September 9, 2021

SECRETARY
Merri Lopez-Keifer
Luiseno

Eileen Barrow
Tom Origer and Associates

PARLIAMENTARIAN
Russell Attebery
Karuk

Via Email to: Eileen@origer.com

Re: Napa Cove Apartments, Napa County

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

Dear Ms. Barrow:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

EXECUTIVE SECRETARY
Christina Snider
Pomo

If you have any questions, please contact me at my email address:
Katy.Sanchez@nahc.ca.gov.

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Sincerely,



Katy Sanchez
Associate Environmental Planner

Attachment

**Native American Heritage Commission
Native American Contacts List
September 9, 2021**

<p>Cachil DeHe Band of Wintun Indians of the Colusa Indian Community Clifford Mota, Tribal Preservation Liaison 3730 Highway 45 Colusa ,CA 95932 cmota@colusa-nsn.gov (530) 458-8231</p>	<p>Wintun (Patwin)</p>	<p>Middletown Rancheria Sally Peterson, THPO P.O. Box 1658 Middletown ,CA 95461 THPO@middletownrancheria.com (707) 987-3670 Office</p>	<p>Pomo Lake Miwok</p>
<p>Cachil DeHe Band of Wintun Indians of the Colusa Indian Community Daniel Gomez, Chairman 3730 Highway 45 Colusa ,CA 95932 dgomez@colusa-nsn.gov (530) 458-8231 (530) 458-4186</p>	<p>Wintun (Patwin)</p>	<p>Mishewal-Wappo Tribe of Alexander Valley Scott Gabaldon, Chairperson 2275 Silk Road Windsor ,CA 95492 scottg@mishewalwappotribe.com (707) 494-9159</p>	<p>Wappo</p>
<p>Cortina Rancheria - Kletsel Dehe Band of Wintun Indians Charlie Wright, Chairperson P.O. Box 1630 Williams ,CA 95987 (530) 473-3274 Office (530) 473-3301 Fax</p>	<p>Wintun / Patwin</p>	<p>Pinoleville Pomo Nation Leona Williams, Chairperson 500 B Pinoleville Drive Ukiah ,CA 95482 (707) 463-1454 (707) 463-6601 Fax</p>	<p>Pomo</p>
<p>Guidiville Indian Rancheria Donald Duncan, Chairperson P.O. Box 339 Talmage ,CA 95481 admin@guidiville.net (707) 462-3682 (707) 462-9183 Fax</p>	<p>Pomo</p>	<p>Yocha Dehe Wintun Nation Anthony Roberts, Chairperson P.O. Box 18 Brooks ,CA 95606 aroberts@yochadehe-nsn.gov (530) 796-3400</p>	<p>Wintun (Patwin)</p>
<p>Middletown Rancheria Jose Simon III, Chairperson P.O. Box 1035 Middletown ,CA 95461 sshope@middletownrancheria.com (707) 987-3670 Office (707) 987-9091 Fax</p>	<p>Pomo Lake Miwok</p>	<p>Yocha Dehe Wintun Nation Leland Kinter, THPO P.O. Box 18 Brooks ,CA 95606 thpo@yochadehe-nsn.gov (530) 796-3400</p>	

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Clifford Mota
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
3730 Highway 45
Colusa, CA 95932

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Mota:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Charlie Wright
Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
P.O. Box 1630
Williams, CA 95987

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Wright:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Donald Duncan
Guidiville Indian Rancheria
P.O. Box 339
Talmage, CA 95481

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Duncan:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Michael Rivera
Middletown Rancheria of Pomo Indians of California
P.O. Box 1035
Middletown, CA 95461

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Rivera:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Jose Simon
Middletown Rancheria of Pomo Indians of California
P.O. Box 1035
Middletown, CA 95461

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Simon:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Scott Gabaldon
Mishewal-Wappo Tribe of Alexander Valley
2275 Silk Road
Windsor, CA 95492

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Gabaldon:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Erica Carson
Pinoleville Pomo Nation
500 B Pinoleville Drive
Ukiah, CA 95482

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Ms. Carson:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Leona Williams
Pinoleville Pomo Nation
500 B Pinoleville Drive
Ukiah, CA 95482

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Ms. Williams:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Laverne Bill
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Bill:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Leland Kinter
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Kinter:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

August 16, 2021

Anthony Roberts
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

RE: Napa Cove Apartments, 3805 Broadway, American Canyon, Napa County

Dear Mr. Roberts:

I am writing to notify you of a proposed project within the County of Napa, for which our firm is conducting a cultural resources study. The project proponent is proposing to approximately four acres of land into a 66-unit apartment complex. This project is subject to both California Environmental Quality Act and Section 106 of the National Historic Preservation Act compliance.

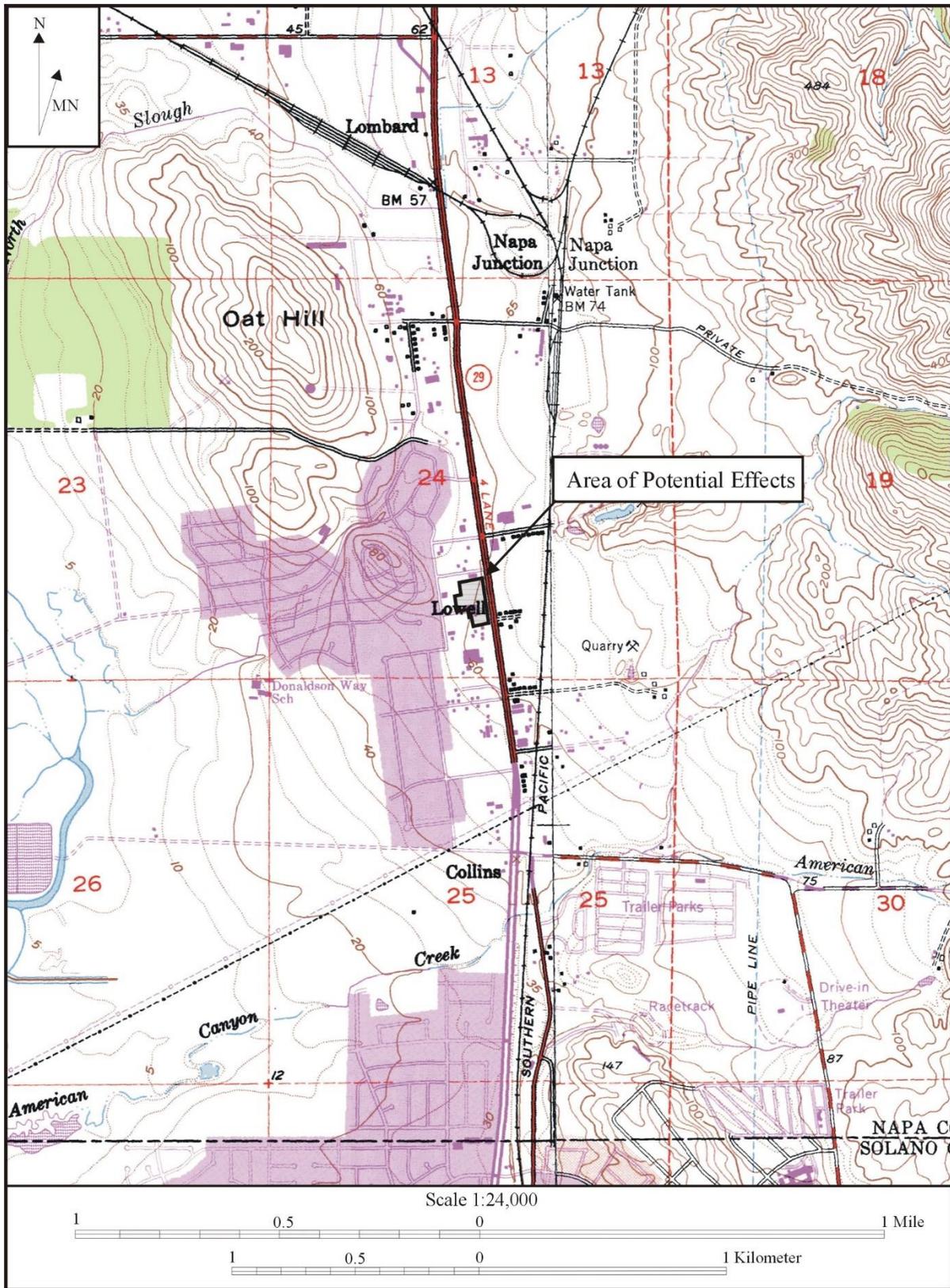
This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Cuttings Wharf, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate





YOCHA DEHE
CULTURAL RESOURCES

August 24, 2021

Tom Origer & Associates
Attn: Eileen Barrow, Senior Associate
P.O. Box 1531
Rohnert Park, CA 94927

RE: Napa Cove Apartments Project

Dear Ms. Barrow:

Thank you for your project notification letter dated, August 16, 2021, regarding cultural information on or near the proposed Napa Cove Apartments Project, American Canyon, Solano County. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, the Tribe has concerns that the project could impact known cultural resources. Please send us the cultural resource study, detailed project information, including any plans for ground disturbance, for this project. Additionally, we would like to request that a record search be performed for the project area and that the attached burial treatment protocol is included in the mitigation measures.

Should you have any questions, please contact the Cultural Resources Departments:

CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe-nsn.gov

Please refer to identification number YD-08162021-05 in any correspondence concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

DocuSigned by:

A handwritten signature in black ink, appearing to be 'M. P.', enclosed in a white rectangular box.

5ED832FDB9C34EA...

Tribal Historic Preservation Officer



YOCHA DEHE
CULTURAL RESOURCES

Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation

The purpose of this Protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, in the event that 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.

I. 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.

II. 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 is in agreement 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.

III. 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



YOCHA DEHE
CULTURAL RESOURCES

Tribal ceremonial and cultural items, including archeological 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.

VI. 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 archeological and cultural significance evaluation by the Project Proponent, the Lead Agency, and the Tribe to determine if 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.

VIII. Work Statement for Tribal Monitors

The description of work for Tribal monitors of the grading and ground disturbing operations at the development site is attached hereto as Addendum I and incorporated herein by reference.



YOCHA DEHE
CULTURAL RESOURCES

given to ensure that human remains are not further impacted by the process of excavation.

(E) Provenience. Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) **Perimeter Balk** (described above), (2) **Exposure** (dirt removed in exposing the exterior/burial plan and associations), and (3) **Matrix** (dirt from the interstices between bones or associations). Thus, each burial may have three bags, “Burial 1 Perimeter Balk,” “Burial 1 Exposure Balk,” “Burial 1 Matrix.”

Please note the provisions below with respect to handling and conveyance of records and samples.

(F) Records. The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for preinterment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supercede information contained in the burial recording form, and (4) photographs, including either or standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

(G) Stipulations for Acquisition and Use of Imagery. Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

(H) Association. Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative, and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

(I) Samples. For each burial, all **Perimeter Balk** soil is to be 1/8”-screened. All **Exposure** soil is to be 1/8”-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All **Matrix** soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.



YOCHA DEHE
CULTURAL RESOURCES

VI. Curation of Recovered Materials

Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of Human Remains – need to be curated, an inventory and location information of the curation facility shall be given to tribe for our records.

APPENDIX B

Photographs



Figure 1. House at 33 Melvin Road (Map number 2). View of front of building facing east.



Figure 2. View of House at 3665 Broadway (Map number 6). View of east side of buildings.

Appendix F – Earthquake Fault Investigation Report

**EARTHQUAKE FAULT INVESTIGATION REPORT
PROPOSED NAPA COVE APARTMENTS
APN'S 058-362-005, 058-362-016 AND 058-362-021
MELVIN ROAD
AMERICAN CANYON, CALIFORNIA**

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SEPTEMBER 23, 2021

JOB NO. 1575.100

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 PURPOSE AND SCOPE OF SERVICES 2

3.0 WEST NAPA FAULT ZONE 2

4.0 FIELD INVESTIGATION 4

5.0 FINDINGS..... 4

5.1 SITE DESCRIPTION 4

5.2 REGIONAL GEOLOGIC CONDITIONS 5

 5.2.1 *Geology* 5

 5.2.2 *Earthquake Faults* 5

5.3 AERIAL PHOTOGRAPH INTERPRETATION 7

5.4 PREVIOUS FAULT INVESTIGATIONS FOR NEARBY DEVELOPMENT SITES..... 7

5.5 EXPLORATORY TRENCH EXPOSURES 10

 5.5.1 *Trench T-1* 10

 5.5.2 *Trench T-2* 11

6.0 CONCLUSIONS AND RECOMMENDATIONS..... 11

7.0 LIMITATIONS 12

REFERENCES 13

LIST OF FIGURES

- Figure 1 – Vicinity Map
- Figure 2 – Earthquake Zones of Required Investigation Map (State of California, 2018)
- Figure 3 – Special Studies Zones (State of California, 1983)
- Figure 4 – Site Plan
- Figure 5 – Quaternary Fault Map
- Figure 6 – Regional Geologic Map (Bezorre, 2002)
- Figure 7 – Preliminary Geologic Map (Sims *et al*, 1973)
- Figure 8 – Bay Area Fault Map
- Figure 9 – Aerial Photograph Interpretation
- Figure 10 – Fault Interpretation Map Based on Existing Studies
- Figures 11 and 12 – Trench Logs

APPENDIX- 1994 Site Plan and Trench Logs by Wallace Kuhl & Associates

September 23, 2021
Job No. 1575.100

Mr. Shady Fayed
CRP Affordable Housing & Community Development
4455 Morena Blvd Suite #107
San Diego, CA 92117

Subject: Earthquake Fault Investigation Report
Proposed Napa Cove Apartments
APN's 058-362-005, 058-362-016 and 058-362-021
Melvin Road
American Canyon, California

Dear Mr. Fayed:

1.0 INTRODUCTION

This report presents the results of our earthquake fault investigation for the proposed Napa Cove Apartments project on Melvin Road in American Canyon, California. The Napa Cove Apartments is proposed on the contiguous properties designated as APN 058-362-005, 058-362-016, 058-362-021. The site is located on the east side of Melvin Road, about 500 feet north of Wilson Way in American Canyon, California. The approximate location of the site is shown on the attached Vicinity Map, Figure 1. Based on our discussion with your representatives, we understand the site is under consideration for development into a multi-unit apartment complex that includes parking and a park area. A residential access/fire road is planned to extend from Melvin Road to the western side of the development and 2 access points off Broadway are planned for the park on the west side of the project. We were provided conceptual massing studies that show various building layouts.

As you are aware, the site is located within the State of California designated Earthquake Fault Zone for the active West Napa fault (CGS, 2018); therefore, a fault investigation is required in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP Act). The goal of the AP Act, which went into effect in 1973, is to mitigate the hazard of surface fault rupture (SFR) by preventing construction of structures intended for human occupancy with a human occupancy rate of more than 2,000 person-hours per year across the surface trace of an active fault. For new structures to be constructed within designated Earthquake Fault Zones, the AP Act generally requires a fault investigation be performed. The intent of the fault investigation is to evaluate a fault's location and determine appropriate fault setbacks to prevent building directly above the zone of ground deformation associated with SFR. The most conclusive of all investigative techniques is exploratory trenching.

To be zoned under the AP Act, a fault must be "*sufficiently active*" during Holocene time (within the past roughly 11,700 years) and be "*sufficiently well-defined*" near the ground surface. A portion of the State of

California's 2018 Earthquake Zones of Required Investigations Map (EZRIM) is provided on Figure 2 for reference. Since the State's 2018 mapping did not include the adjacent quadrangles to the south and east, the 1983 Special Studies Zones Map is also provided on Figure 3 for a larger viewing of the State designated regulatory hazard zone for the West Napa fault.

Based on the results of this investigation, the active West Napa fault is located in the open field adjacent to Melvin Road as shown on the Site Plan, Figure 4. The recommended 50-foot fault-setbacks are also shown on the Site Plan. The recommended fault-setbacks do not impact the currently proposed development.

2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this investigation was to conduct a subsurface fault exploration to evaluate the potential for surface fault rupture (SRF) at the site and to recommend buildings setbacks from identified fault traces. We performed the following scope of services for the project:

1. Conducted geologic research regarding the West Napa fault.
2. Reviewed previous fault investigation reports for nearby development sites.
3. Reviewed stereo-paired aerial photographs of the site vicinity.
4. Obtained encroachment Permits from the City of American Canyon.
5. Marked the site for underground utility clearance.
6. Contracted with an excavation company to dig and backfill 2 exploratory trenches.
7. Cleaned and logged the trench exposure by geologists from our office.
8. Interacted with the City's third party peer reviewer for the project, KC Engineering.
9. Conducted an engineering geologic evaluation of our findings.
10. Consulted with your design team regarding our findings.
11. Prepared this report.

3.0 WEST NAPA FAULT ZONE

The West Napa fault is a roughly 56 kilometer long, right-lateral strike-slip fault that extends from the Carquinez straits to the south to the just west of the Town of St Helena to the north. The fault is part of the San Andreas fault system that forms the generally accepted boundary between the Pacific and North American tectonic plates. Displacement along the West Napa fault is right-lateral strike slip with a significant down to the east vertical component through the Napa Valley. The surface expression of the fault includes offset drainages, east-facing scarps, tonal contrasts in the top soil and linear drainages, tonal contrasts in soils and geomorphic lineaments such as saddles and linear breaks in slope. Slip appears to be distributed across a network of fault splays within the West Napa Fault Zone.

The State of California seismic hazards zonation program compiles fault information and evaluates activity for zonation in accordance with the A-P Act based on Fault Evaluation Reports. The West Napa fault was

first evaluated by the State of California in 1982 and the results were published in Fault Evaluation Report 129 (FER-129). According to FER-129, the southern portion of the West Napa fault was determined active and sufficiently well-defined between the Napa Airport and the Carquinez Straits. North of the Napa Airport, the fault was not well-defined and Holocene activity had not been sufficiently demonstrated at that time, therefore the State created the regulatory hazard zone for the southern portion of the fault but did not zone the northern portion. The site is located in the southern portion of the fault that was zoned in accordance with AP-Act in 1983 (Figure 3). Near the site, the West Napa fault is mapped as a single well-defined trace trending northwest and stepping right as it passes near Oat Hill to the north.

On September 3, 2000 a magnitude M5.1 earthquake occurred with an epicenter located about 10 miles northwest of the Town of Napa in the Hills adjacent to Yountville and Oakville. The earthquake was located in the Maacama Mountains along the west side of the valley and it is not clear if the earthquake is associated with the West Napa or Maacama faults. Prior to the 2000 earthquake, seismicity along the West Napa fault was low; however hundreds of small-scale earthquakes have occurred, generally all located along the west side of the valley within the mapped influence of the West Napa Fault Zone.

The most significant and most studied earthquake along the West Napa fault occurred on August 24, 2014, a M6.0 earthquake occurred with the epicenter located about 6 miles southwest of the Town of Napa, California. The earthquake occurred within the West Napa fault zone with surface rupture reported on 2 main fault splays. The rupture was located in the northern portion of the fault zone, where previously not zoned in accordance with the AP-Act due to a lack of definition and demonstrated activity. The 2014 M6.0 South Napa Earthquake provided information regarding the location of the fault and as result, the Fault Evaluation Report for the West Napa Fault was updated (FER-256) and a new Earthquake Zones of Required Investigations Map was issued on January 11, 2018.

Fault Evaluation Report 256 focused on evaluating new information obtained from the 2014 M6.0 South Napa Earthquake. Faults were mapped based on seismicity, observations of surface fault rupture (SFR), consulting reports and UAVSAR imagery. In the southern portion of the 2014 SFR, FER-256 shows 2 fault splays. The western fault splay is located about 2 miles west of the site. Earthquake epicenters for the 2014 main event and associated aftershocks were located on the western fault. There were no epicenters plotted on the eastern fault; however slip and surface rupture were documented. The eastern fault splay appears to be slightly east of the previously mapped location of the West Napa fault shown on the 1983 Special Studies Zones map that shows the fault passing the site near Melvin Road. The south end of the 2014 SFR on the eastern splay is shown clipping the western portion of the site as shown on the Quaternary Fault Map provided on Figure 5.

On May 21, 2015 a magnitude M4.1 earthquake occurred with the epicenter located about 9 miles north of the Town of Napa, near Yountville. The event is attributed to the northern end of the West Napa Fault Zone and was considered a stress adjustment from the 2014 event.

4.0 FIELD INVESTIGATION

Exploratory trenching is considered the most conclusive of all investigative techniques used to evaluate the potential for SFR. Our field investigation for this project was conducted between September 16 and 17, 2021. The field investigation consisted of the excavation and logging of 2 exploratory trenches, designates as T-1 and T-2 respectively, totaling about 210 lineal feet. Trenches were positioned to cover the portion of the site not shadowed by the previous study of the adjacent site to the south by Wallace Kuhl & Associates (WKA) in 1994. The 1994 WKA study effectively shadowed¹ the majority of the site but did not provide adequate setback information near the fault on the west side of the development and did not cross the eastern limits of the regulatory hazard zone as required. The east end of Trench T-1 was positioned to overlap with Trench A from the WKA study. The trench was excavated from east to west until the fault was encountered. Trench T-2 was positioned to start slightly past the eastern limit of the State designated regulatory hazard zone and was extended to the west to overlap with WKA Trench B.

The exploratory trenches were excavated up to about 12 feet deep by Travis Construction from Martinez, California using a rubber tire Caterpillar 320 backhoe equipped with a three-foot bucket. Trench excavations were benched for safety in accordance with OSHA regulations. The southern trench walls were cleaned by our geologists using hand-picking tools to identify soil stratigraphy and any potential fault-related features. The southern trench wall was graphically logged by our engineering geologist in the field at a scale of 1-inch equals 5 feet. Soil colors noted on the logs were best fit to the Munsell Soil Color Chart published by the Geological Society of America (2017).

Trench Exposures were reviewed and our interpretations were discussed in the field with the City's third party peer reviewer, Jim Joyce representing KC Engineering Company from Vacaville, California. The trench was loosely backfilled and rolled in lifts with a sheep-foot compaction wheel at the completion of logging. Some settlement and rutting should be expected. The approximate locations of our recent trenches (T-1 and T-2) are shown on the Site Plan, Figure 4. The Trench Logs are provided on Figures 11 and 12. Additionally, the previous trenches by WKA are also shown on the Site Plan and their logs are provided in Appendix.

5.0 FINDINGS

5.1 SITE DESCRIPTION

The site is located between Melvin Road and Broadway (Highway 29) in American Canyon, California at the approximate location shown on Figure 1. The proposed development site consists of 3 parcels (APN 058-362-005, 058-362-016, 058-362-021) that total approximately 3.6-acres of land. The site is bound by Melvin Park and tennis courts on the south, residential homes to the north. The site is relatively flat lying, ranging from about Elevation 60 to 62 feet based on County parcel map data.

¹ With respect to fault studies, trenches are typically perpendicular to the fault orientation. Since active faults are generally through-going features, a trench shadows a site if it is oriented in a location that will prove or disprove the presence of an active fault at that location.

The site is currently covered with seasonal grasses. The site was previously developed and areas have been graded. Remnants of old concrete foundations and paved parking areas are located in the southwestern portion of the site as shown on the Site Plan, Figure 4. Additionally, there has been some placement of fill in the western portion of the site which is also shown on Figure 4.

5.2 REGIONAL GEOLOGIC CONDITIONS

5.2.1 Geology

The site is located in the Coast Ranges Geomorphic Province of California. The Coast Ranges are characterized by a series of northwest-trending, folded and faulted mountain chains and intervening valleys. The Coast Ranges were initially uplifted during collision between the Farallon and North American tectonic plates. The prominent northwest-trending structural trend of the Coast Ranges is the result of subsequent right-lateral strike-slip faulting along the San Andreas fault system, a roughly 600-mile-long fault that is considered to be the generally accepted boundary between the Pacific and North American tectonic plates. The fault trends northwest from the Gulf of California, through the Coast Ranges and ends in the Pacific Ocean at the triple junction near Point Arena. The majority of active deformation in the San Francisco Bay Area is believed to have occurred over the past few million years. As a result, the area is highly faulted and folded.

Regional geologic maps (listed in the references) show the site to be underlain by an alluvial fan deposits that were generated from the hills to the east. The fan deposits are considered Late Pleistocene to Early Holocene² in age according to regional geologic maps (Sims *et al.*, 1973, Sowers *et al.*, 1998, Bezore *et al.*, 2002; and Witter *et al.*, 2006). The distal ends of the fan are generally older than the near source portions. Additionally, one characteristic feature is that the older Pleistocene soils are much sandier and more oxidized than the clay-rich Holocene soils, another is well-developed carbonate horizons near the ground surface. The broad large-scale maps by Sowers *et al.* (1998) and Witter *et al.*, (2006) interpreted Late Pleistocene to Early Holocene alluvial fan deposits, map symbol “Q” underlying the site. The mapping of Sims *et al.* (1973) delineated younger Holocene deposits from the older Pleistocene deposits. At the site, the Sims *et al.* (1973) map shows the site to be underlain by older alluvium, map symbol “Qoa”. The regional geologic maps show the West Napa Fault to pass the western portion of the site near Melvin Road. A portion of the Bezore *et al.* (2002 and 1998) geologic maps are provided on Figure 6 and the older 1973 map by Sims *et al.* is provided on Figure 7 for reference.

5.2.2 Earthquake Faults

The site is in an area considered to have a relatively high seismicity due to the proximity of several active faults in the region as shown on Figure 8. As previously discussed, the site is located within a State of California designated Earthquake Zones of Required Investigation for the active West Napa fault (Figure 2). The State of California considers a fault active if it has demonstrated movement within the Holocene

² The beginning of the Holocene Epoch of geologic time was about 11,700 years before present. The older Pleistocene Epoch extends from about 11,700 years back to about 1.5 million years before present.

Epoch of geologic time, within the past roughly 11,700 years. Only Holocene-active faults that are sufficiently active and sufficiently well-defined near the ground surface are zoned in accordance with the A-P Act.

The closest known active faults in the SF Bay Area within an approximately 50 mile radius from the center of the site that are believed to present the highest potential levels of ground shaking at the site, the distance from the site, and estimated characteristic moment magnitude³ (Petersen et al., 2014; Thompson et al., 2016) are summarized in Table 1 below. These references are based on the Uniform California Earthquake Rupture Forecast, Version 3.0 (UCERF3), prepared by Field et al. (2013).

TABLE 1. Potential Active Earthquake Fault Sources

FAULT SOURCE⁴	APPROXIMATE DISTANCE TO FAULT TRACE (Miles)⁵	COMPASS DIRECTION TO FAULT	SLIP RATE (Millimeters per year)	MAXIMUM E.Q. MAG. (M)
West Napa fault	SEE FIGURE 4	W	1 ± 1	6.97
Green Valley fault	5½	NE	5 ± 3	6.30
Rodgers Creek fault- Southern	9¼	NW	9 ± 2	7.58
Concord fault – Ygnacio Valley Section	11¼	NE	4 ± 2	6.45
Hayward fault- Northern	13¼	SW	9 ± 2	7.00
Greenville fault – Clayton Section	21	SE	2 ± 1	6.86
Mt. Diablo Thrust ⁶	23½	SW	2 ± 1	6.72
Calaveras fault - Northern	25	SE	6 ± 2	6.86
San Andreas fault – Peninsula	29½	SW	24 ± 3	7.38
Maacama	31	NW	9 ±	6.9
Greenville fault – Marsh Creek- Greenville Section	34	SE	2 ± 1	6.64
San Gregorio	35	SW	7 ± 3	7.44

Potentially active faults are faults with Quaternary displacement (within the past 1.6 million years) but do not show evidence for Holocene activity, these faults are considered Pre-Holocene faults (Special Publication 42, 2018 update) and do not meet the criteria for zoning under the AP Act. Some faults in this category may be active with a smaller role in the tectonic setting or with a larger recurrence interval than would be detected under the AP-Act or simply have not been adequately characterized to date.

³Moment magnitude (M) is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

⁴ 2008 Fault sources included in the 2014 Fault Parameters provided by the U.S. Geological Survey’s Earthquake Hazards Program on-line web tools.

⁵ Fault locations and distances to the site were determined from the KML files provided from the Quaternary Fault and fold Database and were measure from the center of the site.

⁶ The Mount Diablo Thrust fault is a blind fault that is not zoned in accordance with the A-P Act due to insufficient evidence of activity and surface expression. While it is mapped a Quaternary fault, it is considered a potential seismic source and is therefore also included in Table 1 above.

Quaternary (potentially active) faults in close proximity to the site include the South Hampton fault and Franklin fault located about 3¾ miles to the southwest and 7½ miles to the southeast, respectively. While these faults are not zoned as active faults, there is some debate about their role in the tectonic setting as slip is transferred from the north end of the Calaveras fault to the northwest into the West Napa and Rodgers Creek fault systems. The Soda Creek fault is located along the east side of Napa Valley about 10 miles northeast of the site. The Tolay and Lakeview faults are located about 11 and 12 miles to the west respectively. The Bennet Valley fault is located about 12 miles to the northwest, and the Burdell Mountain fault is about 16 miles southwest of the site.

5.3 AERIAL PHOTOGRAPH INTERPRETATION

We reviewed 12 sets of stereo-paired aerial photographs covering the site vicinity between the years 1958 and 2005. Aerial photographs were obtained from the archive library at Pacific Aerial Surveys in Novato, California. Aerial photographs were viewed by our engineering geologist using an Old Delft ODSII scanning stereo-scope. Since this was a study of regional-scale to evaluate the locations of active faults impacting the site, photographs were at a scale adequate to review the regional conditions, generally between 1:12,000 and 1:36,000. Additional images were viewed online from the U.C. Santa Barbara library and from the Google Earth timeline function.

Based on our review of the aerial photographs, the West Napa fault is expressed as a sharp tonal contrast in the surface soils trending northwest through the site vicinity. The earlier photographs viewed from 1958 through 1966 showed the clearest indications of the fault as a sharp contrast between darker soils on the east side and lighter colors of the west. The photo-lineament aligns with the faults encountered in nearby studies of Twinning (2005), RGH (2007) and Earth Focus (2018). The photo-lineament suggests the West Napa fault clips the southwestern edge of the western tennis court⁷ immediately south of the site, cross through the City Parcel just west of the project site and is lost on the developed area to the northwest. The photo-lineament we interpret to represent the location of the West Napa fault is shown on a copy of the 1958 aerial photograph on Figure 9.

5.4 PREVIOUS FAULT INVESTIGATIONS FOR NEARBY DEVELOPMENT SITES

We reviewed nearby fault investigation reports prepared for development sites located in the State of California designated Earthquake Fault zone for the West Napa fault. Our review was limited to about a ½ mile radius from the site. Available reports from the CGS are from the years prior to 2000; therefore some we collected the results from several more recent reports but some reports were not available at the time of our study. The 2005 study by Twinning Laboratories and 2018 study by Earth Focus were provided to us by the peer reviewer. Studies by RGH in 2005 and 2007 were described in the 2018 Earth Focus report. The approximate locations of these investigation sites are shown on the Fault Interpretation Map on Figure 10. The most pertinent report to this project is the 1994 fault investigation by Wallace Kuhl & Associates as discussed below.

⁷ The lineament appears to clip the western end of the doubles ally on the deuce side of the court.

AP 2798

Wallace Kuhl & Associates Inc. performed a fault investigation of the site at 19 Melvin Road which is located immediately south of the project site as shown on Figure 10. The investigation included 2 exploratory trenches up to about 10 feet deep. The geologists interpreted the trenches to be absent indications of active faulting. The report concluded that the mapped trace of the West Napa fault is located along the western property boundary based on the 1983 Special Studies Zones map. The AP file includes a peer review letter from Darwin Meyers and Associates accepting the results of the fault study.

The WKA study is adjacent to the proposed Napa Cove Apartments site, in fact one of the trenches (Trench B) crossed into the southwestern portion of the project site as shown on Figure 4. That trench data can be projected through the project site as it shadows the majority of the planned development area. Therefore we relied on the WKA study to clear the majority of the site from active faulting. The approximate locations of the WKA trenches are shown on the Site Plan, Figure 4. A copy of the WKA plan and logs are provided in the Appendix.

3519 Broadway – not on file

Earth Focus Geological Services, Inc. performed a fault investigation of the 3519 Broadway site which is located on the north side of Donaldson Way about 2/10 of a mile south of the project site. Earth Focus excavated and logged 2 exploratory trenches up to about 9 feet deep in the eastern portion of the property as shown on Figure 10. The West Napa fault was encountered in both trenches. The fault offset soil horizons and formed a groundwater barrier with elevated water levels on the east side of the fault that was within about 4 feet of the ground surface. The active fault zone identified in the trenches was interpreted to be about 8 feet wide and extend to near the ground surface. The fault projects as a relatively straight line with the fault encountered during our investigation.

3439 and 3441 Broadway – not on file

We performed a fault investigation at the 3439 and 3441 Broadway properties in 2018. The study was located about ¼ mile to the south and included a single exploratory trench totaling about 270 lineal feet. The trench was excavated and logged up to about 9 feet deep and exposed continuous stratigraphy across the trench. There were no indications of active faulting observed. The eastern end of the trench was terminated due to the presence of a municipal water main. The fault was interpreted to be just beyond the end of the trench; therefore 50-foot fault setbacks were recommended. The project was reviewed and approved by KC Engineering.

Canyon Plaza – not on file

Canyon Plaza was constructed on the north side of Crawford Way between 2002 and 2004. The development is located about 1/3 of a mile to the south. We could not locate reports or documents regarding faulting or geotechnical investigations at the site. However, we understand that Neil O. Anderson & Associates performed an investigation in the northeast corner of the site in 1999. Based on

review of the 2018 Earth Focus report, we understand that a trench was excavated in the northeast corner of the plaza and that the trench log did not reflect the presence of an active fault.

Google Earth images from 2002 suggest a linear green vegetated area trending northeast to southwest in the southern portion of the Plaza, across the field directly north of Crawford Way. The linear vegetation is similar to the trench locations observed in the area from other studies in 2007; therefore we believe there may be additional data that was not located.

3448 Broadway – not on file

RGH performed a fault investigation of the American Canyon Car Wash site located at 3448 Broadway in 2007, about a third of a mile to the southeast. The investigation included a 190 foot long trench up to about 9 feet deep. The trench exposed continuous un-faulted soil layers without indications of active faulting. RGH concluded the West Napa fault was about 200 feet to the west of the site. Green vegetation from the trench excavation can be seen on the 2007 Google Earth images.

Vacant Parcel on northwest intersection of Crawford Way and Highway 29 – not on file

We performed a fault investigation at the vacant parcel located on the southwest corner of Highway 29 (Broadway) and Crawford Way in 2018. The study included a single exploratory trench totaling about 320 lineal feet. The trench extended from near the eastern property boundary to just past the southwestern boundary of the Earthquake Zone of Required Investigation as shown on Figure 9. The trench was excavated and logged up to about 9 feet deep. There were no indications of active faulting in the trench. The site is located about 650 feet south; therefore, we utilized the trench information to the 3439 Broadway site to shadow the western portion of the AP Zone.

Corner of Broadway and Holcomb Lane

In 2007 RGH performed a fault investigation of the parcel located at the corner of Broadway and Holcomb Lane, about 4/10 of a mile southeast of the project site. The investigation included 2 exploratory trenches up to about 11 feet deep. The West Napa fault was encountered in Trench T-1. The fault was about 2 feet wide with elevated groundwater levels on the east side of the fault. RGH recommended 50-foot setbacks from the identified fault trace. Green vegetation from the trench excavation can be seen on the 2007 Google Earth images.

Smith Ranch – not on file.

Berlogar Geotechnical Consultants performed a fault exploration of the Smith Ranch property in the early 2000's as the approximate location shown on Figure 7. The investigation was located on the east side of the railroad tracks northeast of the site. The investigation included excavation of an exploratory trench extending east from the railroad tracks. No fault indications of active faulting were identified.

AP 3341

The 2005 investigation by Twinning Laboratories was located on the northeast corner of American Canyon

Road and Highway 29, about ½ mile southeast of the site studied herein. The Twinning study included excavation and logging of 5 exploratory trenches; 4 of which encountered the West Napa fault. The consultant recommended 50-foot wide setbacks for buildings intended for human occupancy.

Figure 10 shows the location of the site, Twinning's exploratory trenches and their interpretation of the fault location (purple line). The site has recently been developed with townhomes while observing 50-foot wide setbacks on each side of the fault.

AP-2167

J.H. Kleinfelder & Associates conducted a fault study for the Medeiros subdivision located about ½ mile northeast of the site. The investigation included 2 exploratory trenches totaling about 230 lineal feet. An active fault was encountered in T-1 based on truncation of a thin gravel layer and elevated groundwater levels on the east. Kleinfelder recommended a 50-foot fault setback. The AP file includes a peer review letter from Darwin Meyers and Associates accepting the results of the fault study. The fault located by the Kleinfelder study represents the southern end of the fault as it steps right at Oat hill and does not connect to the fault identified herein.

5.5 EXPLORATORY TRENCH EXPOSURES

Our engineering geologist visually inspected and logged the southeast wall of both trench exposures. Based on our observations of pedogenic⁸ features such as color, texture, clay skins and carbonate development we were able to delineate several units in the stratigraphy of both trenches. The site is underlain by a thin layer of Holocene soil development on Pleistocene-aged alluvial fan deposits. The Holocene soils are dark brown to black and blocky. These soils are generally 4 to 5 feet thick across the site. A well-developed carbonate horizon generally marks the top of the sand-rich Pleistocene fan deposits. The West Napa fault was identified at the west end of Trench T-1.

5.5.1 Trench T-1

Trench T-1 is located in the western portion of the site along the north side of the residential access/fire road. The trench exposed 18- to 10-inches of artificial fill (log unit A) consisting of yellow-brown sandy clay that was dry and generally loose. Beneath the fill, the trench exposed well-developed Holocene soil horizons (log units B, C east of the fault and M, N, K west of the fault) developing on the Pleistocene fan deposits. We interpreted the soil to be about 3-feet thick beneath the fill. Therefore, the Pleistocene soils were located about 5 to 6 feet below the ground surface. Large carbonate nodules and veins up to 2-inches wide were observed about 5 to 7 feet below the ground surface (log unit D) that represents a well-developed B_{tk} horizon of Pleistocene age. Columnar ped structures with clay films were further indications of a Pleistocene age for the soils in the lower half of the trench.

The West Napa fault was identified at Station 1+25 at the west end of the trench. The fault consisted of 6 to 8-inch thick layer of clay gouge. The gouge was very wet, soft and sticky. We measured the near

⁸ Pedogenesis is the process of soil formation.

vertical gouge zone across the bottom of the trench trending about N20W. The previously mentioned fan deposits were sharply truncated at the fault. The fault appeared to flower towards the ground surface resulting in a potential surface rupture width of about 6 to 8 feet above the fault. West of the fault the Pleistocene deposits consisted of a series of thinly laminated sandy clay with pebbles. Colluvial wedges at the bottom of the trench indicate that the West Napa fault has an up to the west vertical component at this location. We did not identify shearing our gouge above 5 feet below the ground surface. However, we did note a significant color change in the top soil across the fault as shown on the log; which would explain the sharpness of the air photograph lineament discussed above.

5.5.2 Trench T-2

Trench T-2 is located in the eastern portion of the site. The trench exposed well-developed Holocene soil horizons (log units A, B and C) east of the fault and M, N, K west of the fault) developing on the Pleistocene fan deposits. Again, large carbonate nodules and veins up to 2-inches wide were observed about 5 to 7 feet below the ground surface (log unit D) that represents a well-developed Btk horizon of Pleistocene age. Columnar ped structures with clay films were further indications of a Pleistocene age for the soils in the lower half of the trench. There were no indications of active faulting exposed in the trench.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this project, the active trace of the West Napa fault is located in the open field just west of the development area as shown on Figure 4. The fault identified at the west end of T-1 is clearly Holocene active as surficial soils are discontinuous across the fault zone. Additionally, the exposure demonstrates an up to the west component of the strike-slip fault which is consistent with other studies on the region. Therefore we recommend a 50-foot setback for buildings intended for human occupancy as shown on the Site Plan, Figure 4.

The fault location aligns well with air photo lineament previously discussed and is a strait connection with the fault identified in previous studies in the region. Our interpretation of the fault location through the area is shown on Figure 10.

The fault location should be surveyed in the field for documentation. We placed rebar and white flags in the ground at the edge of the trench where we located the fault. The fault can be relocated by measuring from the northern gate post along the driveway to the Mosquito Abatement facilities. From the northern gate post, the fault is located 25 feet north and 35 feet west. From there, the fault trends N20W.

Our trenches in combination with the WKA trenches shown on Figure 4 effectively cover the site within the State of California designated Zone of Required Investigation for the West Napa fault. No additional fault investigations are needed for the currently planned development.

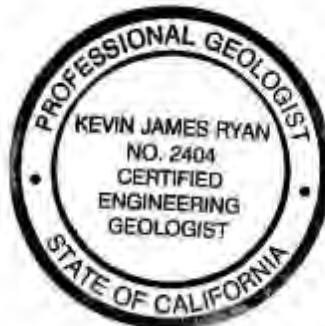
The exploratory trench was backfilled with the excavated materials at the completion of logging. The backfill was placed in lifts and wheel rolled with a sheep-foot compaction wheel. While the trench backfill was compacted it is not considered engineered fill suitable to support the new building and should be removed and replaced with engineered fill during site development.

7.0 LIMITATIONS

The results of this project are based upon the information provided to us regarding site improvements, the findings of our field investigation, geologic research, and professional judgment. This project has been conducted in accordance with currently accepted engineering geologic standards only; no other warranty is expressed or implied. Site conditions and locations of features discussed in the text of the report are those that existed during our field visit in September 2021 and are not necessarily representative of other features, locations or times. If subsurface conditions encountered during construction vary from those interpreted in this report, our firm should be contacted to review the conditions for any changes in our recommendations. The review would be acknowledged in writing.

Respectfully submitted,
RYAN GEOLOGICAL CONSULTING, INC.


Kevin James Ryan, P.G., C.E.G.
Principal Engineering Geologist



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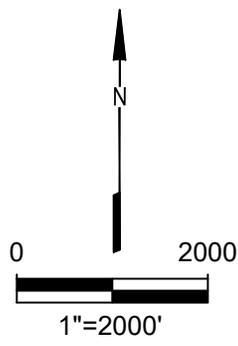
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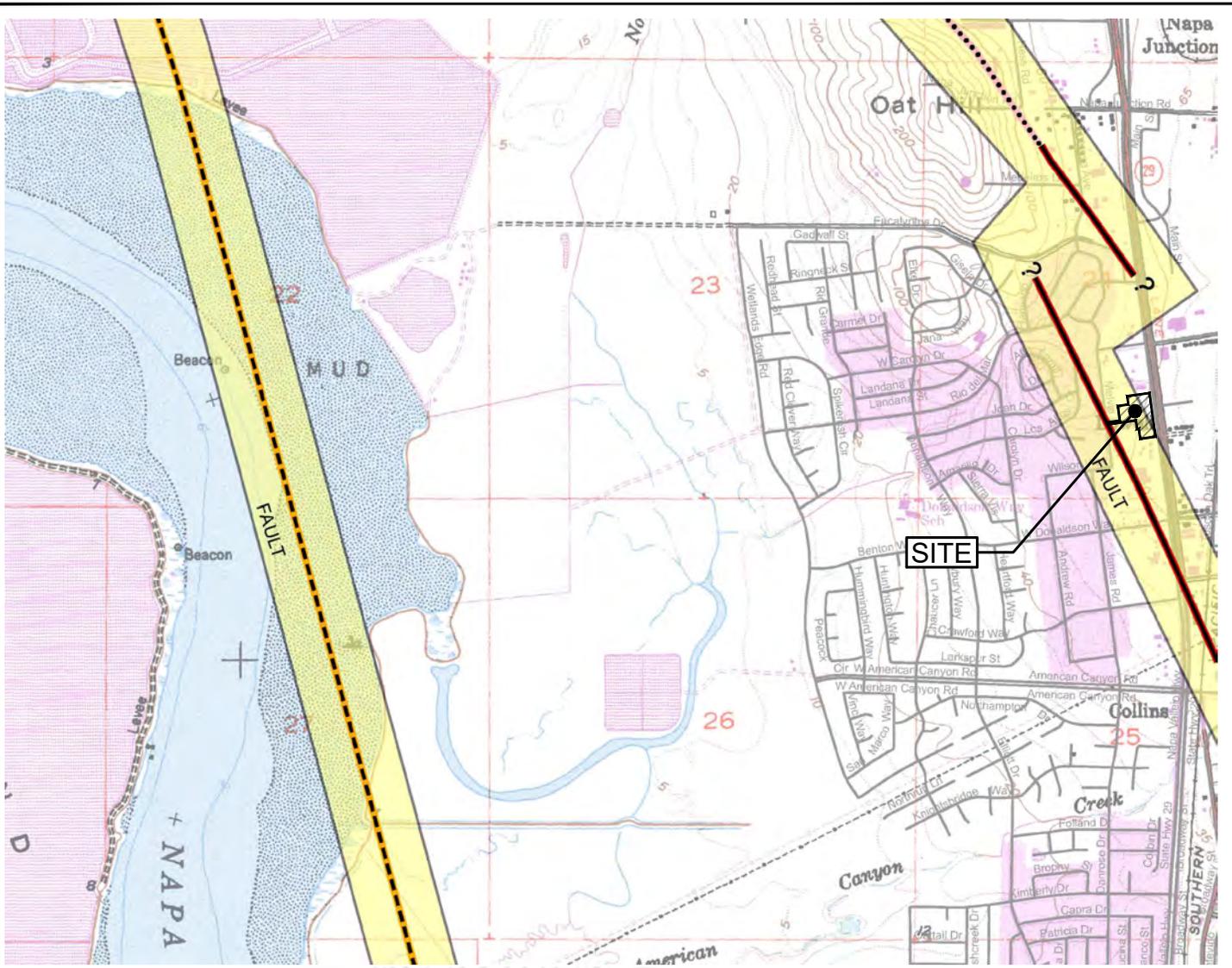
AERIAL PHOTOGRAPHS

FILM ID	FLIGHT LINE	FRAMES	NOMINAL SCALE	DATE FLOWN
KAV 8930	15	29,30,31	1:15,000	2-3-05
AV 5461	6	20, 21, 22	1:12,000	7-29-97
NAP AV 4535	6	18,19, 20	1:12,000	9-7-93
AV 3619	6	36A,37A,38A	1:28,200	5-19-89
AV 2854	5	5,6,7	1:12,000	5-13-86
AV 2050	8	14,16	1:54,000	11-2-81
AV 1700	8	13,14	1:54,000	5-11-79
AV 215	8	11,12	1:54,000	9-4-75
AV 844	13	14,15,16	1:30,000	4-20-68
Av 710	9	12,13	1:36,000	4-20-66
AV 550	8	8,9,10	1:36,000	7-25-63
SF-AREA	2	8,9,10	1:36,000	3-2-58

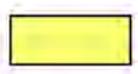


BASE: PORTIONS OF U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES, CUTTINGS WHARF AND CORDELIA, CALIFORNIA AT A SCALE OF 1:24,000.

VICINITY MAP		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 1
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		

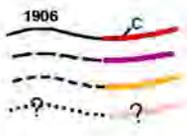


MAP EXPLANATION



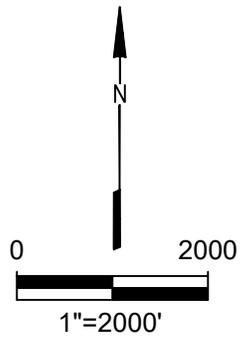
Earthquake Fault Zones

Zone boundaries are delineated by straight-line segments; the boundaries define the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.



Active Fault Traces

Faults considered to have been active during Holocene time and to have potential for surface rupture: Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line in Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by fault creep.



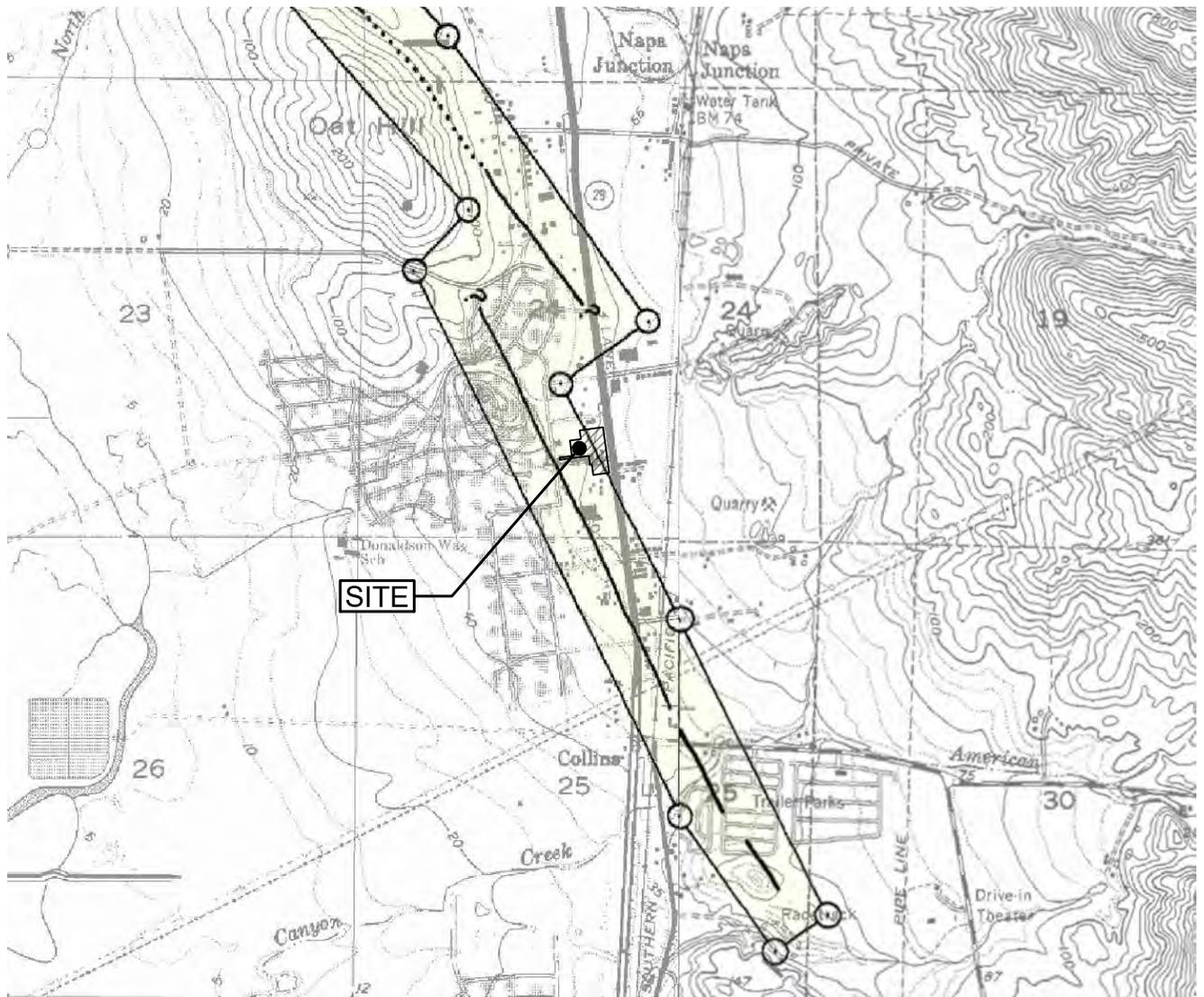
EARTH QUAKE ZONES OF REQUIRED INVESTIGATION MAP (STATE OF CALIFORNIA 2018)

Proposed Napa Cove Apartments
 APN's 058-362-005, -016, -021
 Melvin Road
 American Canyon, CA

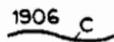
Date: 9-23-2021 | Project No. 1575.100 | Figure 3

RYAN GEOLOGICAL CONSULTING, INC.
 PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

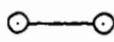
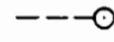
BASE: PORTION OF STATE OF CALIFORNIA EARTHQUAKE ZONES OF REQUIRED INVESTIGATION, CUTTINGS WHARF QUADRANGLE, CALIFORNIA AT A SCALE OF 1:24,000.

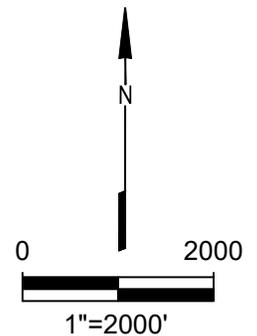


Potentially Active Faults


 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.



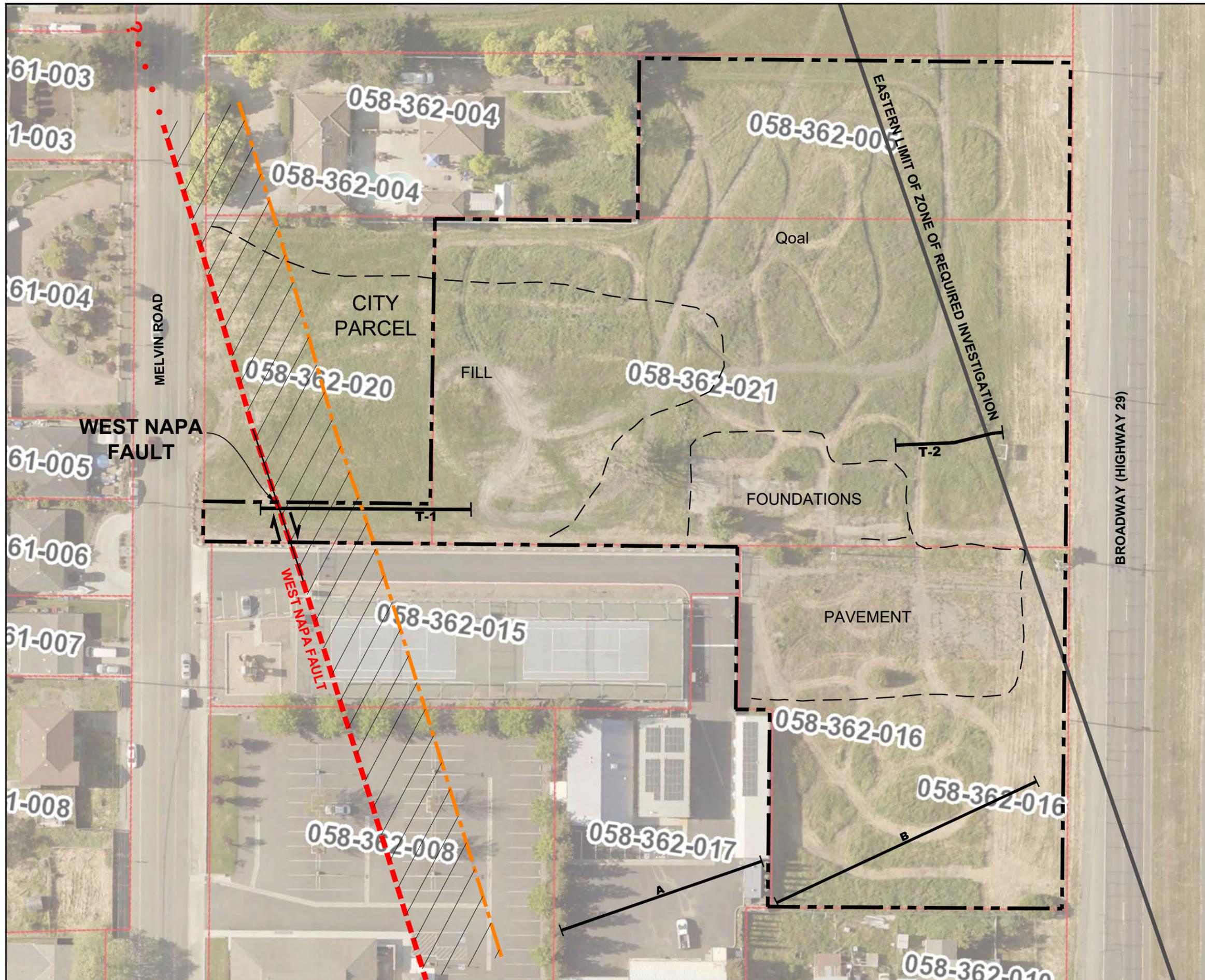
**SPECIAL STUDIES ZONES
(STATE OF CALIFORNIA 1983)**

Proposed Napa Cove Apartments
 APN's 058-362-005, -016, -021
 Melvin Road
 American Canyon, CA

Date: 9-23-2021	Project No. 1575.100	Figure 4
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RYAN GEOLOGICAL CONSULTING, INC.
 PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

BASE: PORTION OF STATE OF CALIFORNIA SEISMIC HAZARD ZONES, CUTTINGS WHARF AND CORDELIA QUADRANGLES, CALIFORNIA AT A SCALE OF 1:24,000.

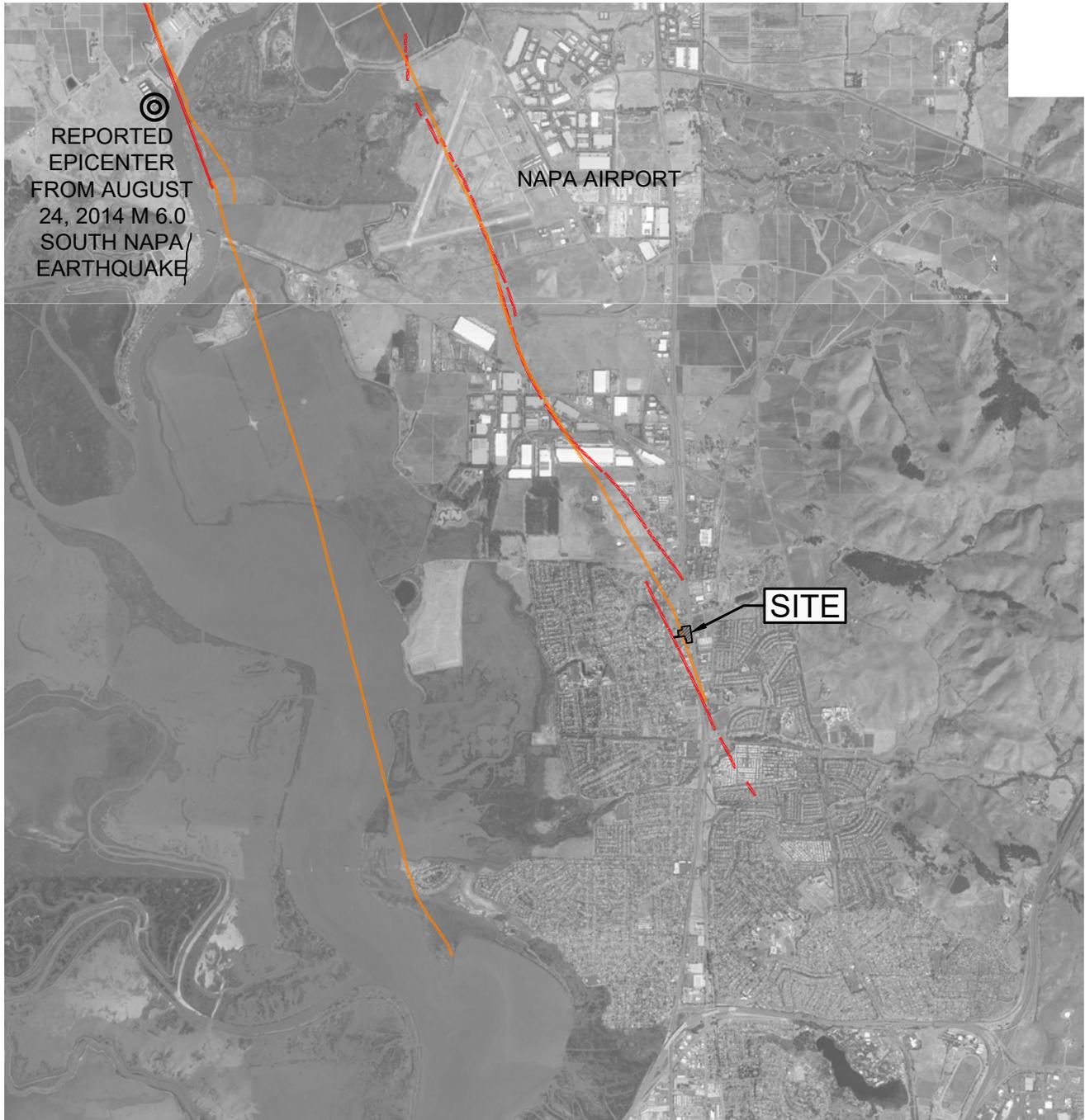


EXPLANATION

-  PROPERTY BOUNDARY
-  **SPECIAL STUDIES ZONE BOUNDARIES**
THESE ARE DELINEATED AS STRAIGHT-LINE SEGMENTS.
-  **T-2** TRENCH LOCATION (THIS STUDY)
-  **B** TRENCH LOCATION (WALLACE AND KUHL, 1994)
-  WEST NAPA FAULT BASED ON THIS STUDY
-  50 FOOT FAULT SETBACK FOR BUILDINGS INTENDED FOR HUMAN OCCUPANCY

SITE PLAN

Proposed Napa Cove Apartments		
APN's 058-362-005, -016, -021		
Melvin Road		
American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 2
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		



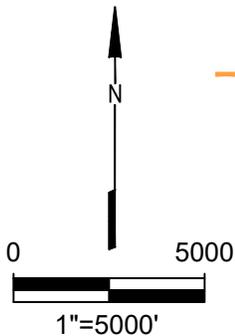
Ⓞ
 REPORTED
 EPICENTER
 FROM AUGUST
 24, 2014 M 6.0
 SOUTH NAPA/
 EARTHQUAKE

NAPA AIRPORT

SITE

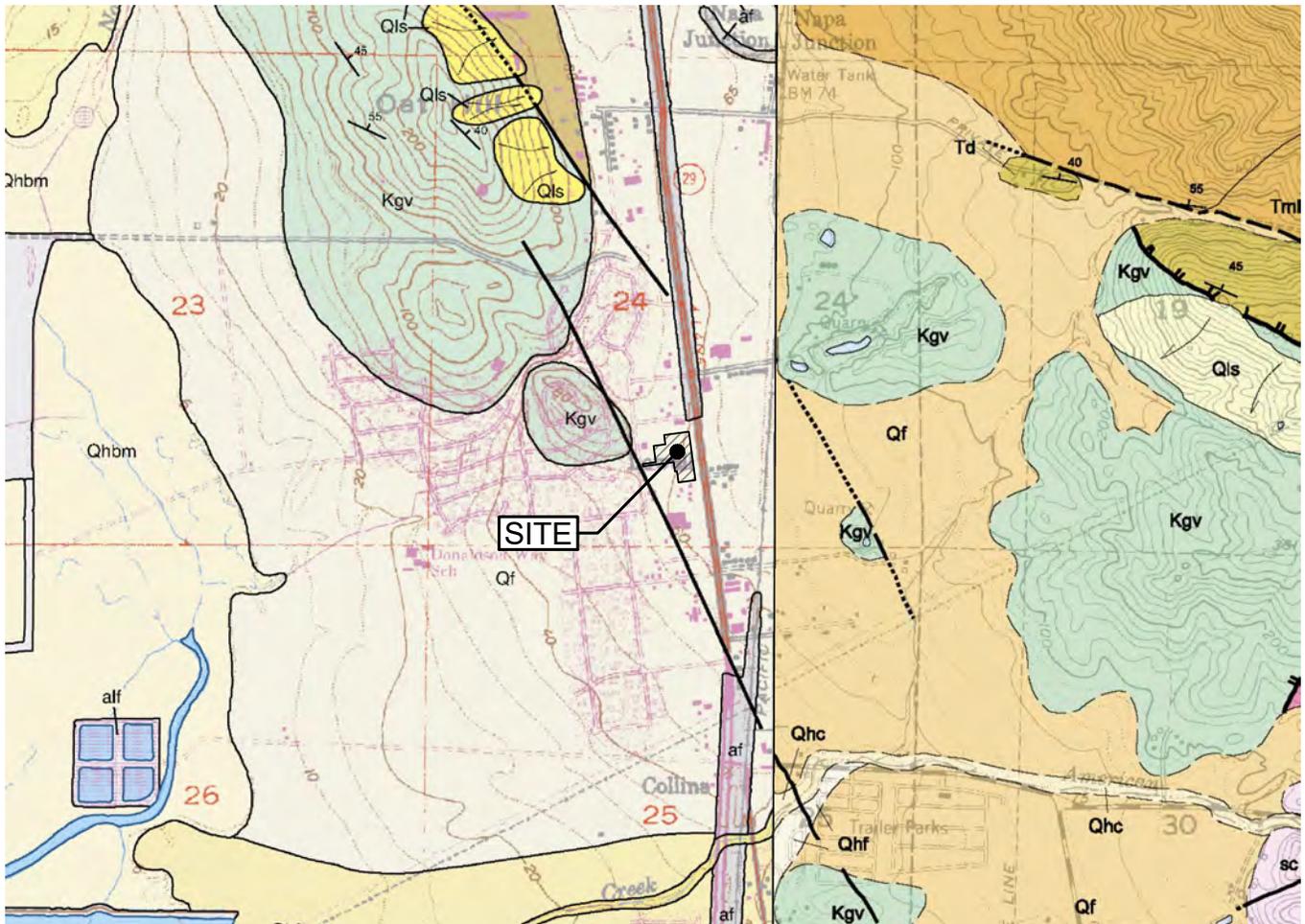
EXPLANATION

- QUATERNARY FAULT TRACES IN THE DATABASE FOR FAULT NO. 36A
- FAULTS FROM FER 256 PLATE 4



QUATERNARY FAULT MAP		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 5
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		

BASE: BRYANT, W.A., COMPILER, 2000, FAULT NUMBER 36A, WEST NAPA FAULT, BROWNS VALLEY SECTION, IN QUATERNARY FAULT AND FOLD DATABASE OF THE UNITED STATES: U.S. GEOLOGICAL SURVEY WEBSITE, [HTTP://EARTHQUAKES.USGS.GOV/HAZARDS/QFAULTS](http://earthquakes.usgs.gov/hazards/qfaults)

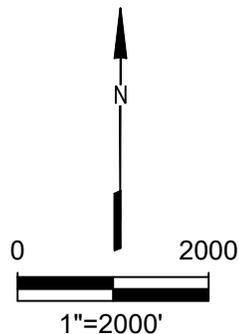


EXPLANATION

- CONTACT - DEPOSITIONAL OR INTRUSIVE CONTACT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED
- - - FAULT - DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED SAWTEETH ARE ON UPPER PLATE OF LOW ANGLE THRUST FAULT
- af ARTIFICIAL FILL

Qhf HOLOCENE FAN DEPOSITS. HOLOCENE ALLUVIAL FAN SEDIMENTS, DEPOSITED BY STREAMS EMANATING FROM THE MOUNTAINS AS DEBRIS FLOWS, HYPERCONCENTRATED MUDFLOWS, OR BRAIDED STREAM FLOWS. SEDIMENTS INCLUDE SAND, GRAVEL, SILT AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED

Qf LATE PLEISTOCENE TO HOLOCENE FAN DEPOSITS. GENTLY SLOPING, FAN-SHAPED, RELATIVELY UNDISSECTED ALLUVIAL SURFACES WHERE LATE PLEISTOCENE OR HOLOCENE AGE WAS UNCERTAIN OR WHERE THE DEPOSITS OF DIFFERENT AGE INTERFINGER SUCH THAT THEY COULD NOT BE DELINEATED AT THE MAP SCALE. SEDIMENTS INCLUDE SAND, GRAVEL, SILT, AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED.



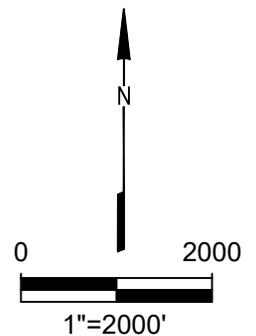
REGIONAL GEOLOGIC MAP (Bezorre et al, 2002)		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 6
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		

BASE: PORTIONS OF GEOLOGIC MAP OF THE CUTTINGS WHARF AND CORDELIA QUADRANGLES, NAPA AND SOLANO COUNTIES, VERSION 1.0 BY STEPHEN BEZORRE, ET ALL, 2002



EXPLANATION

-  CONTACT - DEPOSITIONAL OR INTRUSIVE CONTACT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED
- Qoal** OLDER ALLUVIUM MAINLY FLOOD-PLAIN AND ALLUVIAL-FAN DEPOSITS ADJACENT TO MOUNTAINOUS AREAS; SAND, GRAVEL, SILT, AND CLAY IRREGULARLY INTERSTRATIFIED, COMMONLY UNCONSOLIDATED.
- KJgvm?** MUDSTONE, SHALE, SILTSTONE, SANDSTONE, AND CONGLOMERATE; DOMINANTLY MUDSTONE AND SHALE. SANDSTONES ARE THIN-BEDDED DISCONTINUOUS LITHIC FELDSPATHIC WACKES; CONGLOMERATE IS POLYMICT.



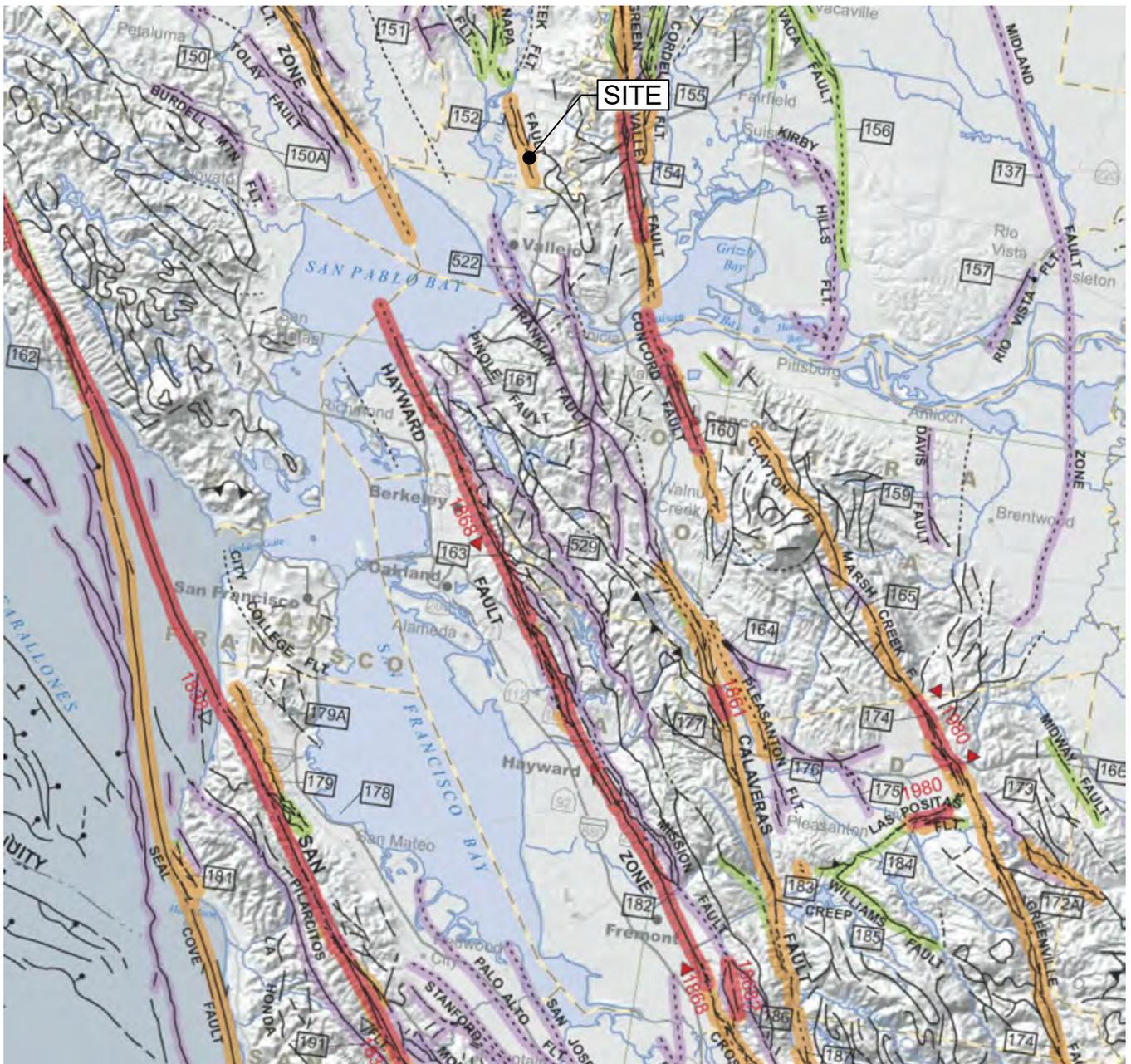
PRELIMINARY GEOLOGIC MAP (Sims et al, 1973)

Proposed Napa Cove Apartments
 APN's 058-362-005, -016, -021
 Melvin Road
 American Canyon, CA

Date: 9-23-2021 | Project No. 1575.100 | Figure 7

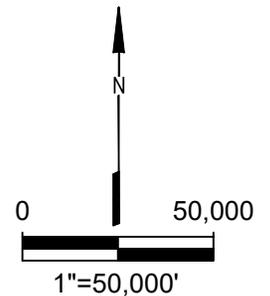
RYAN GEOLOGICAL CONSULTING, INC.
 PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

BASE: PORTIONS OF PRELIMINARY GEOLOGIC MAP OF SOLANO COUNTY AND PARTS OF NAPA, CONTRA COSTA, MARIN, AND YOLO COUNTIES, CALIFORNIA, COMPILED BY: J.D SIMS, K.F FOX JR, J.A BARTOW AND E.J. HELLEY, 1973



EXPLANATION

-  FAULT ALONG WHICH HISTORIC (LAST 200 YEARS) WITH HISTORIC RECORD DISPLACEMENT HAS OCCURRED
-  HOLOCENE FAULT DISPLACEMENT (WITHIN PAST 11,700 YEARS) WITHOUT HISTORIC RECORD
-  LATE QUATERNARY FAULT DISPLACEMENT (WITHIN PAST 700,000 YEARS)
-  QUATERNARY FAULT (AGE UNDIFFERENTIATED)
-  PRE-QUATERNARY FAULT



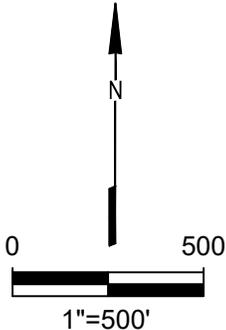
BAY AREA FAULT MAP (JENNINGS, 2010)		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 8
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		

BASE: JENNINGS, J.W. AND BRYANT, W.A., 2010 FAULT ACTIVITY MAP OF CALIFORNIA: CALIFORNIA GEOLOGICAL SURVEY, GEOLOGIC DATA MAP NO. 6.



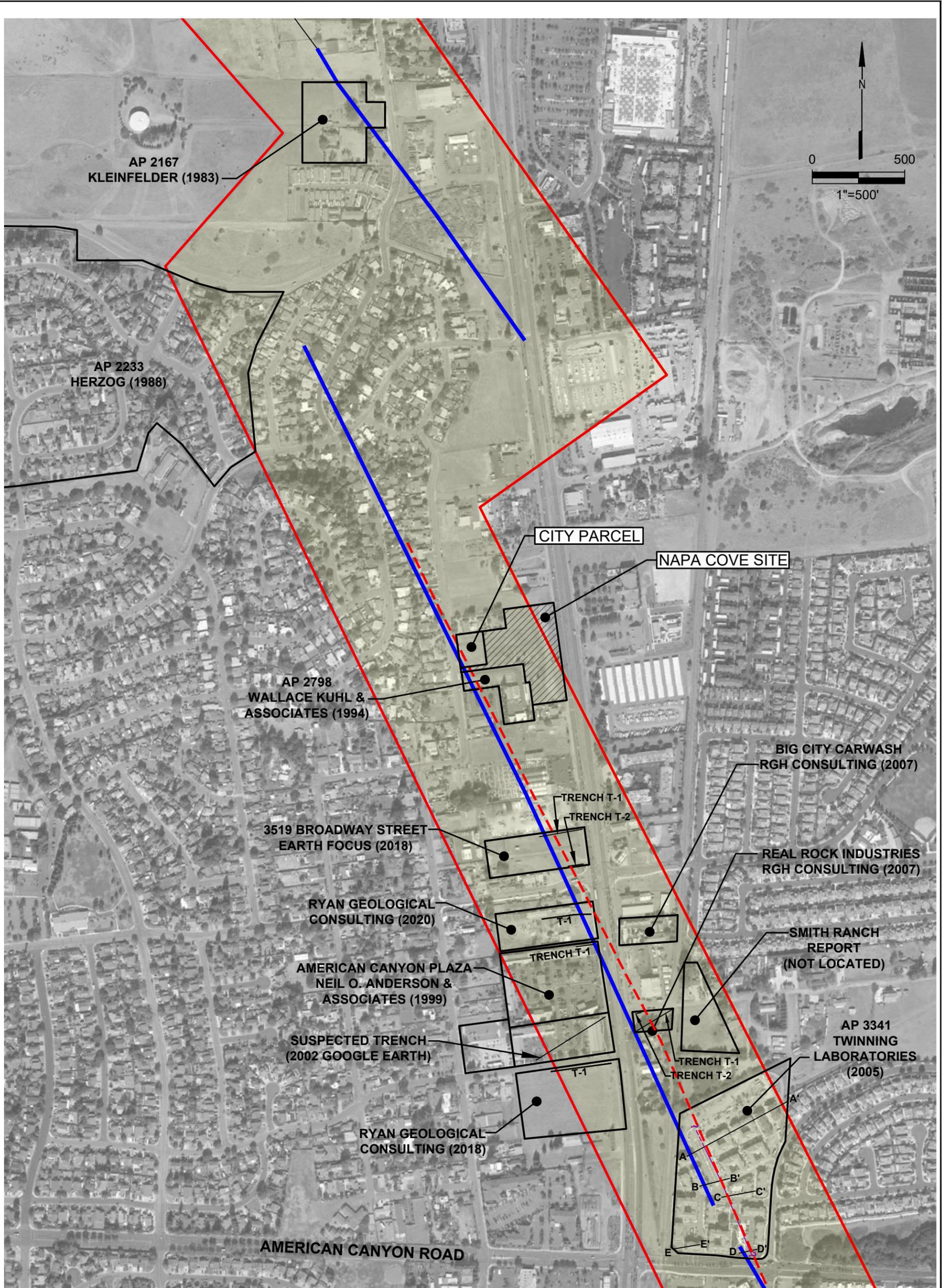
EXPLANATION

----- PHOTO LINEAMENT



BASE: AERIAL PHOTO DATED 1958

AERIAL PHOTO INTERPRETATION MAP		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 9
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		



EXPLANATION

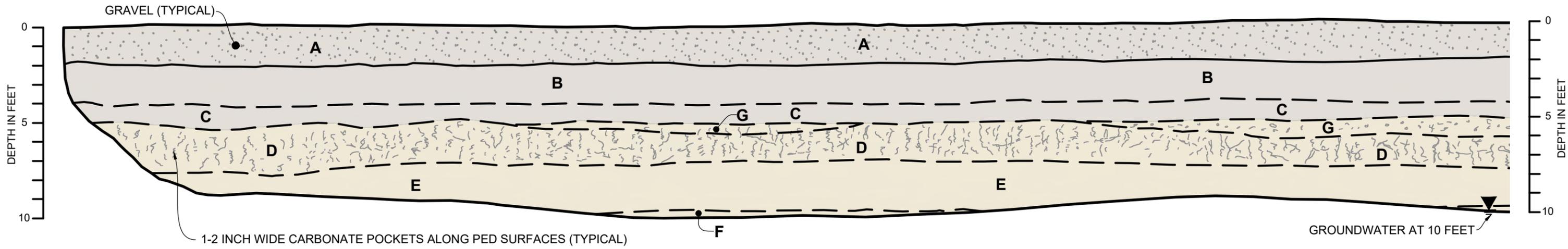
- EARTHQUAKE ZONES OF REQUIRE INVESTIGATION (SPECIAL STUDIES ZONES) THESE ARE DELINEATED AS STRAIGHT-LINE SEGMENTS.
- WEST NAPA FAULT SHOWN ON EQZRIM (STATE OF CALIFORNIA, 2018)
- APPROXIMATE LOCATION OF EXISTING FAULT INVESTIGATION REPORTS
- APPROXIMATE TRENCH LOCATIONS
- LOCATION OF WEST NAPA FAULTBASED ON AERIAL PHOTOGRAPHS AND REGIONAL FAULT STUDIES

FAULT INTERPRETATION MAP BASED ON EXISTING STUDIES		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 10
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		

TRENCH T-1
TREND 270° LOG OF SOUTH WALL

EAST END

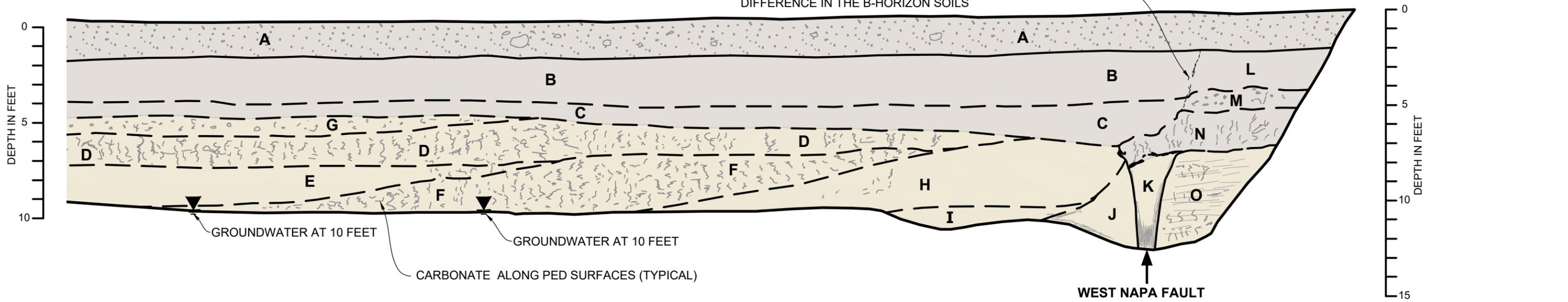
0+00 0+10 0+20 0+30 0+40 0+50 0+60 0+70



TRENCH T-1
(CONTINUED)

0+70 0+80 0+90 1+00 1+10 1+20 1+30 WEST END

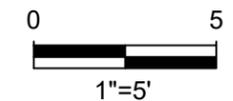
NO SHEARS IDENTIFIED IN SOIL BUT THERE IS A SLIGHT COLOR DIFFERENCE IN THE B-HORIZON SOILS



WEST NAPA FAULT
TRENDING N20°W
6-8 INCHES OF LIGHT OLIVE-GRAY (5Y 6/2) CLAY GOUGE
AT BOTTOM OF TRENCH,
2 INCH THICK SHEARS BOUND UNIT "L"

- GROUND SURFACE AND BOTTOM OF TRENCH
- - - - - GEOLOGIC CONTACT, SOLID WHERE SHARP, DASHED WHERE APPROXIMATE
- HOLOCENE SOIL DEVELOPMENT
- PLEISTOCENE FAN DEPOSITS

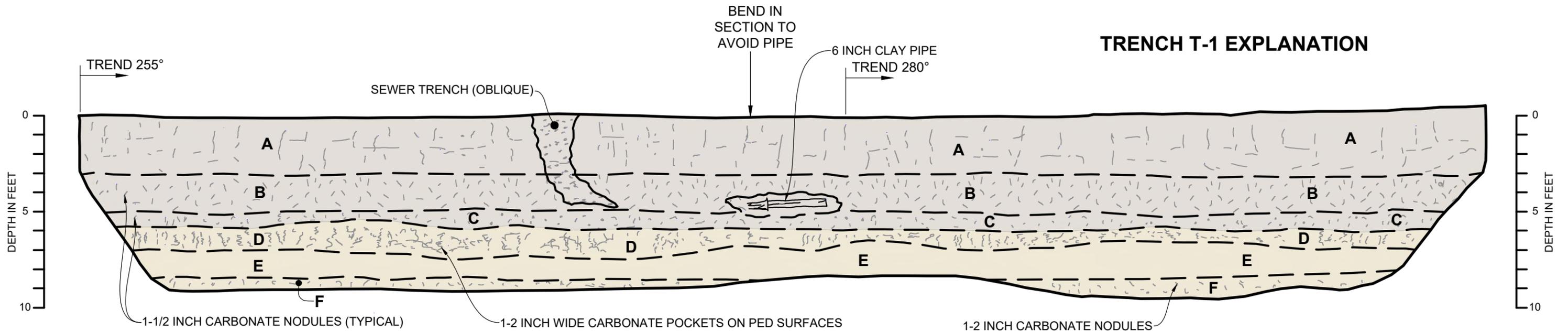
***UNIT DESCRIPTIONS ON FIGURE 12**



TRENCH T 1		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 11
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		
		336

TRENCH T-2
LOG OF SOUTH WALL

EAST END 0+00 0+10 0+20 0+30 0+40 0+50 0+60 0+70 WEST END



TRENCH T-1 EXPLANATION

TRENCH T-1 DESCRIPTIONS

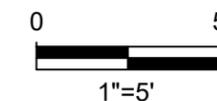
- A** SANDY CLAY WITH GRAVEL, YELLOW-BROWN (7.5YR 5/6), DRY, MEDIUM STIFF, COARSE-GRAINED SAND, GRAVEL UP TO 3-INCH DIAMETER (ARTIFICIAL FILL)
- B** FAT CLAY, BLACK (10YR 2/1), MOIST, STIFF, BLOCKY PED STRUCTURE (AB HORIZON)
- C** CLAY, DARK GRAY (10YR 3/1), MOIST, STIFF, SOIL INVERSION CRACKS, FAINT BLOCKY STRUCTURE WITH CLAY SKINS (B_t HORIZON)
- D** CLAY, GRAY (7.5YR 4/1), MOIST, STIFF, BLOCKY PED STRUCTURE, 1 TO 2 INCH CARBONATE VIENS AND CLAY SKINS ALONG PED SURFACES (B_k HORIZON)
- E** SANDY CLAY, STRONG BROWN (7.5YR 4/6), MOIST, STIFF, FINE-GRAINED SAND, COLUMNAR PED STRUCTURE WITH CLAY SKINS (2B_t HORIZON)
- F** CLAY, GRAY (7.5YR 5/1), MOIST, STIFF, FINE-GRAINED SAND, FAINT COLUMNAR PED STRUCTURE WITH CLAY SKINS AND CARBONATE POCKETS UP TO 2-INCHES WIDE. (2B_k HORIZON)
- G** CLAY, MOTTLED STONG-BROWN AND GRAY (7.5YR 6/2), MOIST, STIFF, MIXING ZONE WITH CLAY SKINS
- H** CLAY, GRAY (7.5YR 6/1) MOIST, STIFF, TRACE CARBONATE, TRACE FINE-GRAINED SAND
- I** CLAY, BROWN (7.5YR 4/4), MOIST, STIFF, TRACE GRAVEL UP TO 1/2-INCH DIAMETER (COLLUVIAL WEDGE FROM WEST)
- J** SANDY CLAY, STRONG-BROWN (7.5YR 5/8, MOIST STIFF, FINE-GRAINED SAND

- K** CLAY, OLIVE-GRAY (5Y 5/1) MOIST, MEDIUM STIFF TO STIFF
- L** FAT CLAY, DARK GRAY-BROWN (10YR 3/2), MOIST, STIFF (AB HORIZON)
- M** CLAY, DARK BROWN, (10YR 4/4) MOIST, STIFF, CARBONATE NODULES UP TO 1 1/2-INCH DIAMETER (B_k HORIZON)
- N** CLAY, GRAY (10YR 6/1), MOIST, STIFF, BLOCKY PED STRTURE WITH CARBONATE NODULES UP TO 1/2-INCH DIAMETER (B_k HORIZON)
- O** CLAYEY SAND, YELLOWISH RED (5YR 5/8), MOIST, DENSE, MEDIUM TO COARSE GRAINED SAND, TRACE GRAVEL AND HORIZONTAL PEBBLE STRINGERS

- GROUND SURFACE AND BOTTOM OF TRENCH
- - - - - GEOLOGIC CONTACT, SOLID WHERE SHARP, DASHED WHERE APPROXIMATE
- HOLOCENE SOIL DEVELOPMENTS
- PLEISTOCENE FAN DEPOSITS

TRENCH T-2 DESCRIPTIONS

- A** FAT CLAY, VERY DARK GRAY (10YR 3/1), DRY TO MOIST, STIFF, BLOCKY PED STRUCTURE (AB HORIZON)
- B** FAT CLAY, VERY DARK GRAYISH BROWN (10YR 3/2), MOIST, STIFF, BLOCKY PED STRUCTURE WITH CLAY SKINS AND 1 INCH CARBONATE NODULES (B_{tk})
- C** CLAY, BROWN (7.5YR 5/2), MOIST, STIFF, BLOCKY PED STRUCTURE, 1 INCH CARBONATE NODULES, CLAY SKINS (MIXING ZONE)
- D** CLAY, BROWN (7.5YR 5/4), MOIST, STIFF, SOME FINE-GRAINED SAND, CLAY SKINS, CARBONATE POCKETS UP TO 2 INCHES WIDE
- E** SANDY CLAY, BROWN (7.5YR 5/3), MOIST, STIFF, FINE-GRAINED SAND
- F** CLAY, STRONG BROWN (7.5YR 5/8), MOIST, STIFF, CLAY SKINS AND CARBONATE NODULES UP TO 2 INCHES

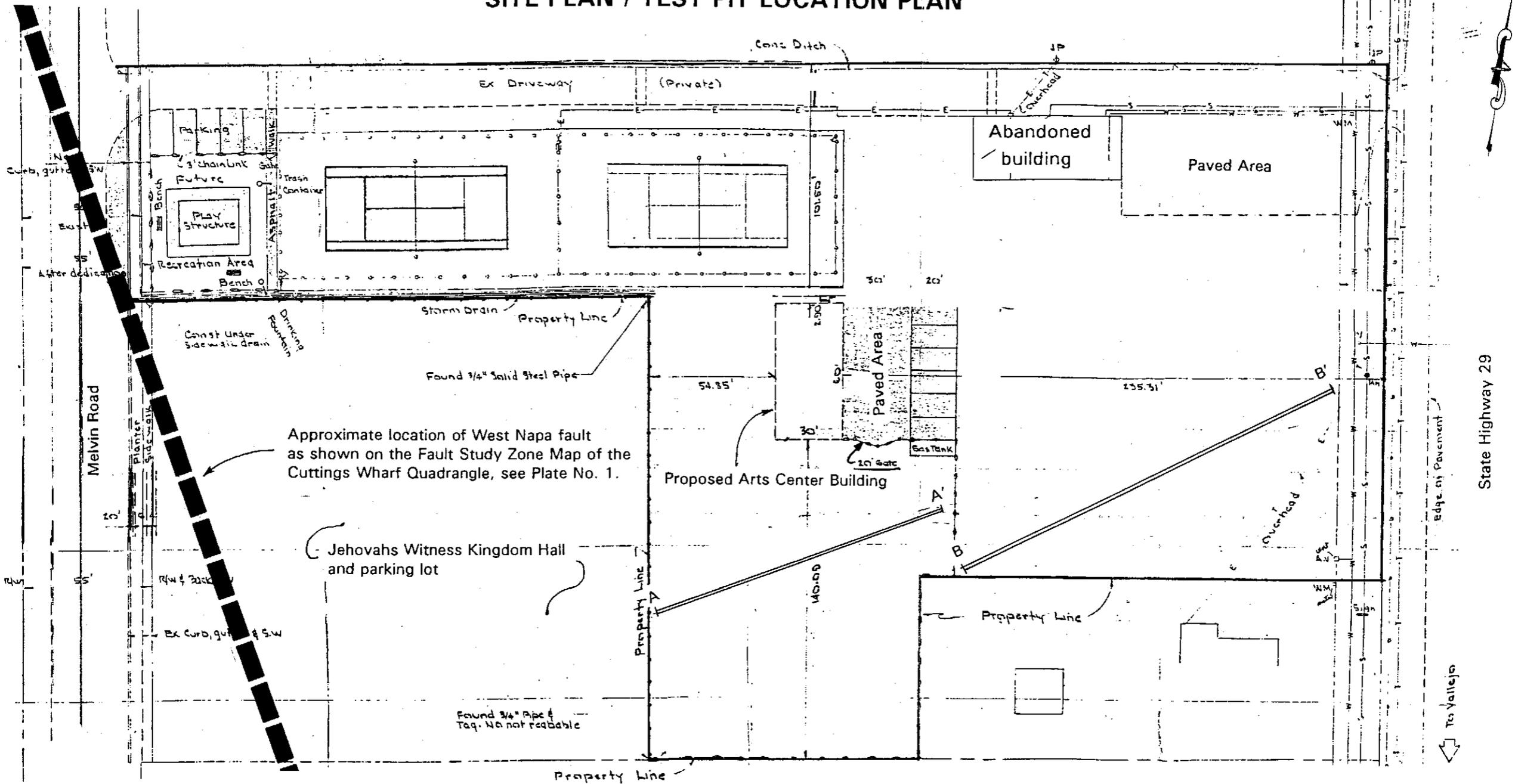


TRENCH T-2		
Proposed Napa Cove Apartments APN's 058-362-005, -016, -021 Melvin Road American Canyon, CA		
Date: 9-23-2021	Project No. 1575.100	Figure 12
RYAN GEOLOGICAL CONSULTING, INC. PROVIDING LOGICAL GEOLOGICAL SOLUTIONS		
		337

APPENDIX

SITE PLAN AND TRENCH LOGS FROM 1994 WKA STUDY

SITE PLAN / TEST PIT LOCATION PLAN



LEGEND

A ——— A'
 Test Pit location

Adapted from a 1" = 20' "plot Plan, Proposed ACCWD Building," prepared by Peter G. Sarant, Civil Engineer.

Scale 1" = 50'
 0 25 50

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 INCORPORATED

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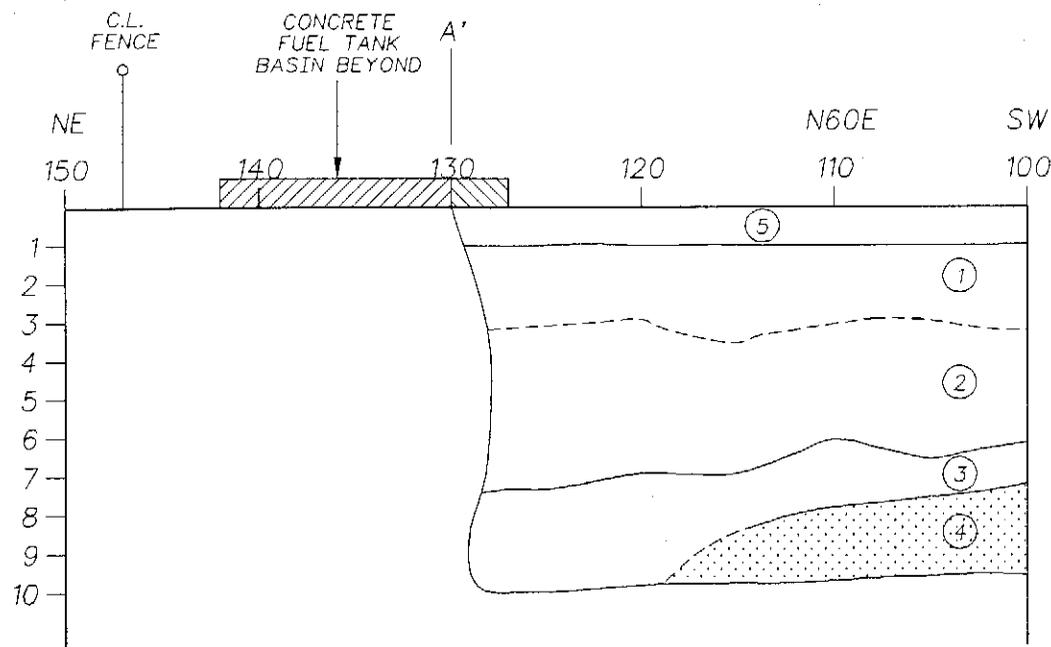
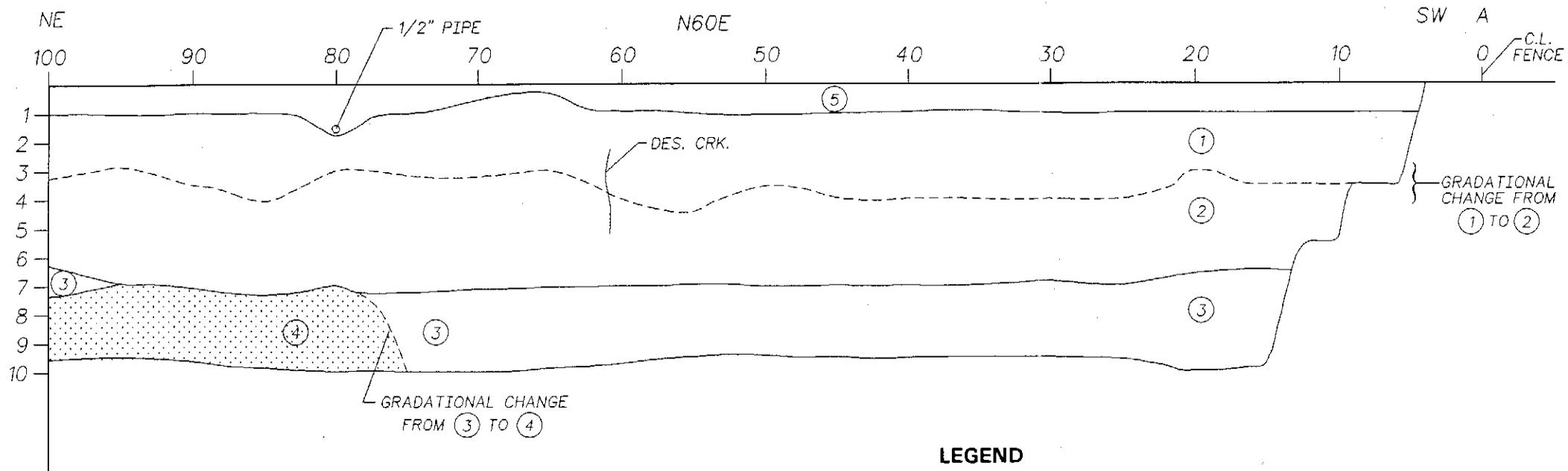
DRAWN BY:
 CHECKED BY:

AMERICAN CANYON CITY ARTS CENTER
 Highway 29
 American Canyon, California



WKA NO: 2772.01
 DATE: 8/94
 PLATE NO: 2

LOG OF EXPLORATION TRENCH A - A'



LEGEND

- ① Very dark gray (10YR3/1), occasionally marbled with red (2.5YR5/8), fine sandy silty clay. Desiccation cracks to 1/2-inch width, 3-foot deep. Some debris within unit, including chain, brick, pottery and horseshoes. Increasing moisture with depth. Grades into unit 2. (CH)
- ② Dark gray (10YR4/1) to dark grayish-brown (10YR4/2) silty clay. Increasing sand and gravel near base of unit. (CH)
- ③ Grayish-brown (2.5Y5/2), silty, fine to medium sandy clay. Marbled with white (2.5Y8/2) carbonate material. Calcite/gypsum nodules to 1-inch diameter. (CH)
- ④ Yellowish-brown (10YR5/4), mottled with black (manganese oxide coated sand and pebbles), fine to coarse sandy clay/ clayey, fine to coarse sand. (CL/SC)
- ⑤ Light brownish-gray (2.5Y6/2), gravelly, sandy clay. Fill? (CL/CH)

NOTES

1. Field investigation performed on July 20, 1994, utilizing a Case 580E backhoe, with a 24-inch wide bucket. Trenches logged by David R. Gius, Jr. (EG 1681).
2. Horizontal scale 1" = 10'
Vertical scale 1" = 5'
3. Ground water was not encountered in the trenches.
4. Location of trenches are indicated on Plate No. 2.

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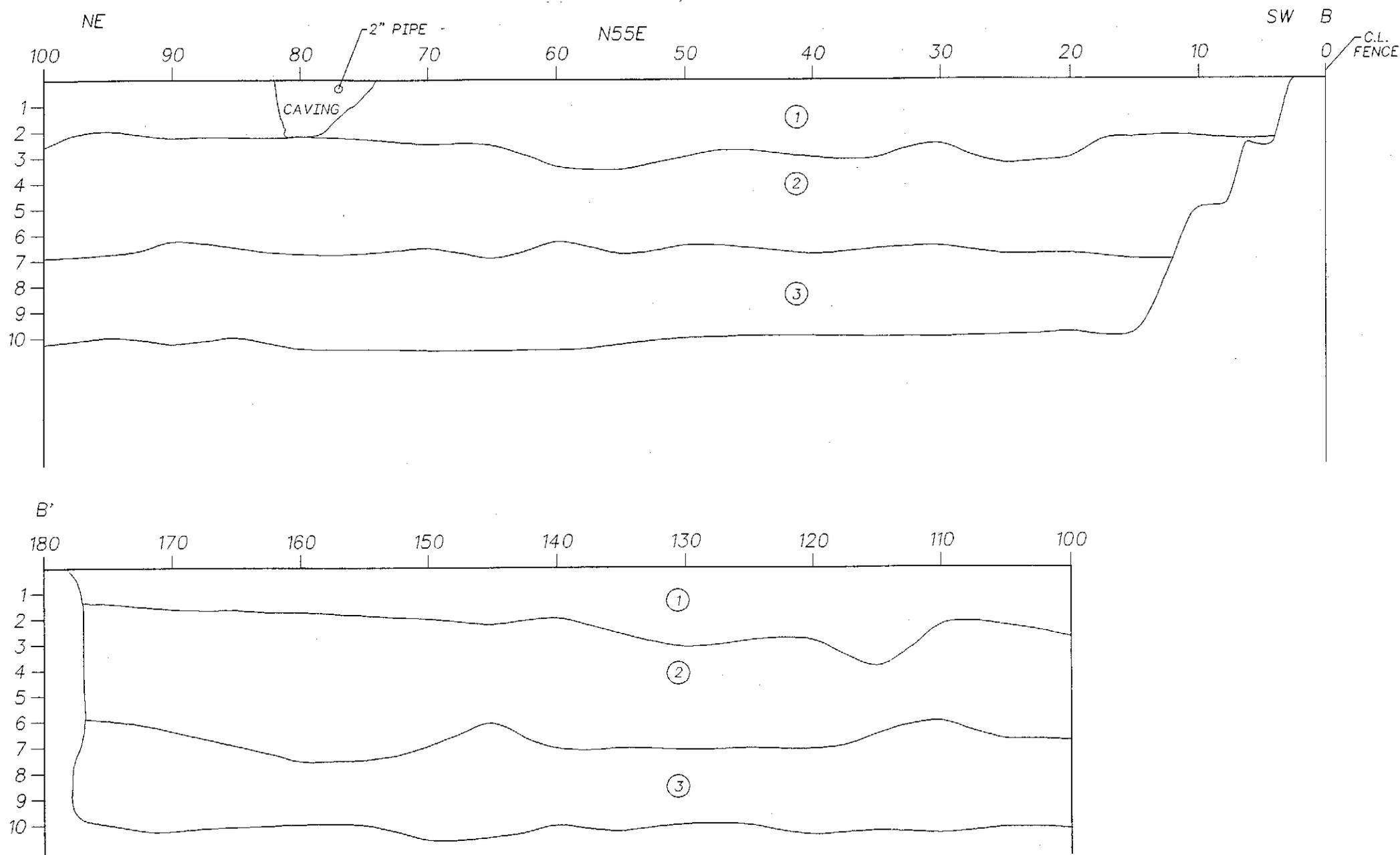
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Highway 29
American Canyon, California



WKA NO: 2772.01
DATE: 8/94
PLATE NO: 7

LOG OF EXPLORATION TRENCH B - B'



NOTES

1. Field investigation performed on July 20, 1994, utilizing a Case 580E backhoe, with a 24-inch wide bucket. Trenches logged by David R. Gius, Jr. (EG 1681).
2. Horizontal scale 1" = 10'
Vertical scale 1" = 5'
3. Ground water was not encountered in the trenches.
4. Location of trenches are indicated on Plate No. 2.

LEGEND

- ① Very dark gray (10YR3/1), occasionally marbled with red (2.5YR5/8), fine sandy silty clay. Desiccation cracks to 1/2-inch width, 3-foot deep. Some debris within unit, including chain, brick, pottery and horseshoes. Increasing moisture with depth. Grades into unit 2. (CH)
- ② Dark gray (10YR4/1) to dark grayish-brown (10YR4/2) silty clay. Increasing sand and gravel near base of unit. (CH)
- ③ Grayish-brown (2.5Y5/2), silty, fine to medium sandy clay. Marbled with white (2.5Y8/2) carbonate material. Calcite/gypsum nodules to 1-inch diameter. (CH)

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Highway 29
American Canyon, California



WKA NO: 2772.01
DATE: 8/94
PLATE NO: 8

Appendix G – Geotechnical Engineering Investigation Report

**GEOTECHNICAL ENGINEERING INVESTIGATION
UPDATE
PROPOSED NAPA COVE APARTMENTS
BROADWAY STREET NEAR ANTONIA AVENUE
AMERICAN CANYON, CALIFORNIA**

**PROJECT NO. 032-21058
SEPTEMBER 27, 2021**

Prepared for:

**MR. SHADY FAYED
CRP AFFORDABLE HOUSING
4455 MORENO BOULEVARD SUITE 107
SAN DIEGO, CALIFORNIA 92117**

Prepared by:

**KRAZAN & ASSOCIATES, INC.
GEOTECHNICAL ENGINEERING DIVISION
4320 ORANGE GROVE AVENUE, SUITE E-F
SACRAMENTO, CALIFORNIA 95841
(916) 564-2200**

September 27, 2021

KA No. 032-21058

Mr. Shady Fayed
CRP Affordable Housing
4455 Moreno Boulevard Suite 107
San Diego, California 92117

**RE: Geotechnical Engineering Investigation
Proposed Napa Cove Apartments
Broadway Street near Antonia Avenue
American Canyon, California**

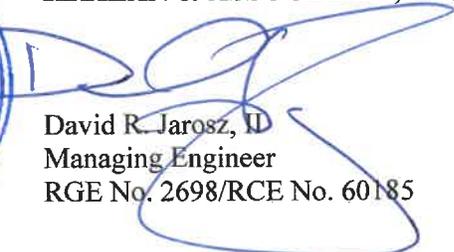
Dear Mr. Fayed:

In accordance with your request, we have completed a Geotechnical Engineering Investigation for the above-referenced site. The results of our investigation are presented in the attached report.

If you have any questions or if we may be of further assistance, please do not hesitate to contact our office at or (916) 564-2200.



Respectfully submitted,
KRAZAN & ASSOCIATES, INC.


David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

DRJ:ht

TABLE OF CONTENTS

INTRODUCTION 1

PURPOSE AND SCOPE..... 1

PROPOSED CONSTRUCTION 2

SITE LOCATION, SITE HISTORY AND SITE DESCRIPTION..... 2

GEOLOGIC SETTING 3

FIELD AND LABORATORY INVESTIGATIONS 3

SOIL PROFILE AND SUBSURFACE CONDITIONS 4

GROUNDWATER..... 5

SOIL LIQUEFACTION..... 5

CONCLUSIONS AND RECOMMENDATIONS..... 6

Administrative Summary 6

Groundwater Influence on Structures/Construction..... 7

Site Preparation..... 8

Engineered Fill..... 10

Drainage and Landscaping..... 11

Utility Trench Backfill..... 11

Foundations..... 12

Floor Slabs and Exterior Flatwork..... 12

Lateral Earth Pressures and Retaining Walls..... 13

R-Value Test Results and Pavement Design..... 14

Seismic Parameters – 2019 CBC 16

Soil Cement Reactivity 16

Compacted Material Acceptance 17

Testing and Inspection 17

LIMITATIONS..... 17

SITE PLANS 20

LOGS OF BORINGS (1 TO 6)..... Appendix A

GENERAL EARTHWORK SPECIFICATIONS..... Appendix B

GENERAL PAVING SPECIFICATIONS Appendix C

September 27, 2021

KA Project No. 032-21058

**GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED NAPA COVE APARTMENTS
BROADWAY STREET NEAR ANTONIA AVENUE
AMERICAN CANYON, CALIFORNIA**

INTRODUCTION

This report presents the results of our Geotechnical Engineering Investigation for the proposed Napa Cove Apartments to be located at Broadway Street near Antonia Avenue in American Canyon, California. Discussions regarding site conditions are presented herein, together with conclusions and recommendations pertaining to site preparation, Engineered Fill, utility trench backfill, drainage and landscaping, foundations, concrete floor slabs and exterior flatwork, retaining walls, pavement design and soil cement reactivity.

A site plan showing the approximate boring locations is presented following the text of this report. A description of the field investigation, boring logs, and the boring log legend are presented in Appendix A. Appendix A contains a description of the laboratory-testing phase of this study, along with the laboratory test results. Appendices B and C contain guides to earthwork and pavement specifications. When conflicts in the text of the report occur with the general specifications in the appendices, the recommendations in the text of the report have precedence.

PURPOSE AND SCOPE

This investigation was conducted to evaluate the soil and groundwater conditions at the site, to make geotechnical engineering recommendations for use in design of specific construction elements, and to provide criteria for site preparation and Engineered Fill construction.

Our scope of services was outlined in our proposal dated April 9, 2020 (KA Proposal P243-20) and included the following:

- A site reconnaissance by a member of our engineering staff to evaluate the surface conditions at the project site.
- A field investigation consisting of drilling 6 borings to depths ranging from approximately 10 to 50 feet for evaluation of the subsurface conditions at the project site.
- Performing laboratory tests on representative soil samples obtained from the borings to evaluate the physical and index properties of the subsurface soils.

- Evaluation of the data obtained from the investigation and an engineering analysis to provide recommendations for use in the project design and preparation of construction specifications.
- Preparation of this report summarizing the results, conclusions, recommendations, and findings of our investigation.

PROPOSED CONSTRUCTION

We understand that design of the proposed development is currently underway; structural load information and other final details pertaining to the structures are unavailable. On a preliminary basis, it is understood that development will include the construction of a new apartment complex. It is anticipated the buildings will be single- to three-story structures utilizing concrete slab-on-grade construction. Foundation loads are anticipated to be light to moderate. On-site paved areas and landscaping are also planned for the development of the project.

In the event, these structural or grading details are inconsistent with the final design criteria, the Soils Engineer should be notified so that we may update this writing as applicable.

SITE LOCATION, SITE HISTORY AND SITE DESCRIPTION

The site is irregular in shape encompasses approximately 3.6 acres. The site is located just west of Napa Valley Highway/Lincoln Highway at Antonia Avenue in American Canyon, California. Vacant land and a residential development are located north of the site. The remainder of the site is predominately surrounded by commercial developments.

Site history was obtained by reviewing historical aerial photographs taken in 1993, 2002, 2012 and 2018. Review of the 1993 aerial photograph indicates that the southern portion of the project site was occupied by a rural residential development consisting three structures and several trees.

Review of the 2002 aerial photographs indicate that the structures were mostly removed. Slabs and foundations were still present on the site. The remainder of the site predominately consisted of vacant land.

Review of the 2012 aerial photograph indicates that the project site conditions appeared to be relatively similar to that noted in the 2002 aerial photograph.

Review of the 2018 aerial photograph indicates that remnants of the previous structures were still present along the southern edge of the site. The remainder of the site predominately consisted of vacant land.

Presently, the site predominately consists of vacant land. Remnants of the previous structures are still present in the southern portion of the site. Several trees are located throughout the site. The site is covered by a moderate weed growth and the surface soils have a loose consistency. Buried may be located along the edges of the site and may extend into the site associated with the previous development. The site is relatively level with no major changes in grade.

GEOLOGIC SETTING

The subject site is located in the north-eastern portion of the San Francisco Bay Region, within the Coast Ranges Geomorphic Province of California. The Coast Range Geomorphic Province borders the Coast of California and generally consists, more or less, of a discontinuous series of northwesterly/southeasterly trending mountain ranges, ridges, and intervening valleys characterized by intense, complex folding and faulting. The ridges are most often comprised of granitic, metavolcanic, and metasedimentary rocks. Numerous northwest to southeast trending faults parallel the trend of the Coast Ranges.

The project site is located in a seismically active region, which is situated on a tectonic plate boundary marked by the San Andreas Fault System and several northwest trending active and potentially active faults. The site is in close proximity to several major faults, including the West Napa, Green Valley, Hayward-Rodgers Creek, Mount Diablo Thrust, Calaveras, and San Andreas faults located within approximately 0.1 miles west, 7.1 miles east, 11 miles west, 24 miles south, 28 miles southeast, and 29 miles west of the site, respectively. **The site is in close proximity to several faults, and the site is within a State of California Earthquake Fault Zone. The site is located just east of the West Napa Fault and within the California Earthquake fault zone for the West Napa Fault. The site is not located on a State of California Seismic Hazard Zone Map. The site will require a site specific Fault Rupture Hazard Study.**

The probability of one or more earthquakes of magnitude 6.7 (Richter scale) or higher occurring in the San Francisco Bay Area within a 30-year period of time is evaluated by the U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities on a periodic basis. The result of the 2008 evaluation indicated a 63 percent likelihood that such an earthquake event will occur in the Bay Area between 2007 and 2036 (USGS 2008). The faults with the greater probability of a magnitude 6.7 or higher earthquake are the Hayward fault at 31 percent and the San Andreas fault at 21 percent.

Based on published geologic maps of the area the near-surface deposits in the vicinity of the subject site are indicated to be comprised of late Pleistocene to Holocene fan deposits of sand, gravel, silt and clay that are moderately to poorly sorted and moderately to poorly bedded. The site is located at an elevation of approximately 60 feet above sea level. Groundwater in the vicinity of the site is typically encountered at depths of approximately 6 to 25 feet.

FIELD AND LABORATORY INVESTIGATIONS

Subsurface soil conditions were explored by drilling 6 borings to depths ranging from approximately 10 to 50 feet below existing site grade, using a truck-mounted drill rig. In addition, 2 bulk subgrade samples were obtained from the site for laboratory R-value testing. The approximate boring and bulk sample locations are shown on the site plan. During drilling operations, penetration tests were performed at regular intervals to evaluate the soil consistency and to obtain information regarding the engineering properties of the subsoils. Soil samples were retained for laboratory testing. The soils

encountered were continuously examined and visually classified in accordance with the Unified Soil Classification System. A more detailed description of the field investigation is presented in Appendix A.

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, density, gradation, shear strength, consolidation potential, expansion potential, plasticity, R-value and moisture density relationships of the materials encountered. In addition, chemical tests were performed to evaluate the soil-cement reactivity. Details of the laboratory test program and results of the laboratory test are summarized in Appendix A. This information, along with the field observations, was used to prepare the final boring logs in Appendix A.

SOIL PROFILE AND SUBSURFACE CONDITIONS

Based on our findings, the subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the upper soils consisted of approximately 6 to 12 inches of very loose/soft clayey sand or sandy silty clay. These soils are disturbed, have low strength characteristics and are highly compressible when saturated.

Beneath the loose surface soils, approximately 1½ to 2½ feet of fill material was encountered. The fill material predominately consisted of clayey sand or sandy silty clay. The thickness and extent of fill material was determined based on limited test borings and visual observation. Thicker fill may be present at the site. Limited testing was performed on the fill soils during the time of our field and laboratory investigations. The limited testing indicates that the fill soil ranged from loosely placed to compacted.

Below the loose surface soils and fill material, approximately 2 to 3 feet of stiff to very stiff silty clay or sandy silty clay were encountered. Field and laboratory tests suggest that these soils are moderately strong, slightly compressible and have a moderate to high potential for expansion. Penetration resistance ranged from 18 to 33 blows per foot. Dry densities ranged from 99 to 110 pcf. A representative soil sample consolidated less than 1 percent under a 2 ksf load when saturated. A representative soil sample had an angle of internal friction of 14 degrees. A representative sample of the clayey soil had an expansion index of 153.

Below 3 to 5 feet, alternating layers of predominately stiff to very stiff silty clay and sandy clay or loose to medium dense silty sand with clay and silty sand/clayey sand were encountered. Field and laboratory tests suggest that these soils are moderately strong and slightly compressible. Penetration resistance ranged from 16 to 35 blows per foot. Dry densities ranged from 98 to 115 pcf. These soils had slightly stronger strength characteristics than the upper soils and extended to the termination depth of our borings.

For additional information about the soils encountered, please refer to the logs of borings in Appendix A.

GROUNDWATER

Test boring locations were checked for the presence of groundwater during and immediately following the drilling operations. Free groundwater was encountered between depths of 6 and 12 feet during our subsurface investigation. The historic high groundwater depth for the region was determined to be 2 feet below existing site grade, based on the State of California Department of Water Resources data from 4 wells within 2½ miles of the site.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, and climatic conditions, as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

SOIL LIQUEFACTION

Soil liquefaction is a state of soil particle suspension, caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs in soils, such as sands, in which the strength is purely frictional. However, liquefaction has occurred in soils other than clean sands. Liquefaction usually occurs under vibratory conditions, such as those induced by seismic events.

To evaluate the liquefaction potential of the site, the following items were evaluated:

- 1) Soil type
- 2) Groundwater depth
- 3) Relative density
- 4) Initial confining pressure
- 5) Intensity and duration of groundshaking

The predominant soils within the project site consist of alternating layers of silty clays, clayey sands, clayey sand/sandy clay and sandy clays. Groundwater was encountered at depths as shallow as 6 feet below existing site grade during our exploratory drilling. Information obtained from the Department of Water Resources indicated that water wells had historic groundwater elevations as shallow as 2 feet below existing site grade within the project site vicinity.

The potential for soil liquefaction during a seismic event was evaluated using the LIQUEFYPRO computer program (version 5.8h) developed by CivilTech Software. For the analysis, a maximum earthquake magnitude of 6.75 was used. A peak horizontal ground surface acceleration of 1.002g was considered conservative and appropriate for the liquefaction analysis. An estimated high groundwater depth of 2 feet was used for our analysis. The computer analysis indicates that soils above a depth of 2 feet are non-liquefiable due to the absence of groundwater. The soils below a depth of 2 feet have a slight to very low potential for liquefaction under seismic shaking due to predominately firm to very stiff clayey soils. The

analysis also indicates that the total and differential seismic induced settlement is not anticipated to exceed $\frac{1}{4}$ and $\frac{1}{8}$ inch, respectively. Accordingly, measures to mitigate liquefaction potential are not necessary.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of our field and laboratory investigations, along with previous geotechnical experience in the project area, the following is a summary of our evaluations, conclusions, and recommendations.

Administrative Summary

In brief, the subject site and soil conditions, with the exception of the loose surface soils, fill material, expansive nature of the clayey soils, and previous development, appear to be conducive to the development of the project. The surface soils have a loose consistency. These soils are disturbed, have low strength characteristics, and are highly compressible when saturated. Accordingly, it is recommended that the surface soils be recompacted. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation.

Approximately $1\frac{1}{2}$ to $2\frac{1}{2}$ feet of fill material was encountered within the borings drilled across the site. The fill material predominately consisted of clayey sand and sandy silty clay. The thickness and extent of fill material was determined based on limited test borings and visual observation. Thicker fill may be present at the site. Limited testing was performed on the fill soils during the time of our field and laboratory investigations. The limited testing indicates the fill soils had varying strength characteristics ranging from loosely placed to compacted. Therefore, it is recommended that the fill soils be excavated and stockpiled so that the native soils can be prepared properly. Over-excavation should extend to a minimum of 5 feet beyond structural elements. The fill material will be suitable for reuse as Engineered Fill provided it is cleansed of excessive organics, debris, and fragments larger than 4 inches in maximum dimension.

The site was previously utilized as agricultural land and occupied by a rural residential development. Associated with these developments may be buried structures, such as utility lines and irrigation lines that extend into portions of the project site. Demolition activities should include proper removal of any buried structures. Any surface or buried structures, including utilities or loosely backfilled excavations, encountered during construction should be properly removed and the resulting excavations backfilled with Engineered Fill. It is suspected that demolition activities of the existing structures will disturb the upper soils. After demolition activities it is recommended that these disturbed soils be removed and/or recompacted. This compaction effort should stabilize the upper soils and locate any unsuitable or pliant areas not found during our field investigation.

It is recommended that following stripping and fill removal operations, the upper 12 inches of soil within the proposed building areas be excavated, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Over-excavation should extend to a minimum of 5 feet beyond structural elements. The on-site, native soils and fill material will be suitable for reuse as general Engineered Fill, provided they are cleansed of excessive organics, debris, and

fragments larger than 4 inches in maximum dimension. Prior to backfilling, the bottom of the excavation should be proof rolled and observed by Krazan & Associates, Inc. to verify stability. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation. Soft or pliant areas should be excavated to firm native ground. Fill material should be compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

It is recommended the upper 36 inches of soil within the area of conventional slabs-on-grade and exterior flatwork consist of non-expansive Engineered Fill. The fill material should be a well-graded silty sand or sandy silt soil. A clean sand or very sandy soil is not acceptable for this purpose. A sandy soil will allow the surface water to drain into the expansive clayey soils below, which may result in swelling. The replacement soil and/or the upper 36 inches of Imported Fill soils should meet the specifications as described under the subheading Engineered Fill. The replacement soils should extend 5 feet beyond footing lines. The non-expansive replacement soil should be compacted to at least 90 percent relative compaction based on ASTM Test Method D1557. The exposed native soils in the excavation should not be allowed to dry out and should be kept continuously moist prior to backfilling. In addition, it is recommended that slab-on-grade continuous footings and slabs be nominally reinforced to reduce cracking and vertical off-set.

As an alternative to the use of non-expansive soils, the upper 36 inches of soil supporting the slab areas can consist of lime-treated clayey soils. The lime-treated soils should be recomacted to a minimum of 90 percent of maximum density. Preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be above optimum moisture during the mixing operations.

The site is in close proximity to several faults, and the site is within a State of California Earthquake Fault Zone. The site is located just east of the West Napa Fault and within the California Earthquake fault zone for the West Napa Fault. The site is not located on a State of California Seismic Hazard Zone Map. The site will require a site specific Fault Rupture Hazard Study.

Tree removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be cleaned to firm native ground and backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Sandy soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavations. Shoring or sloping back trench sidewalls may be required within these sandy soils.

After completion of the recommended site preparation, the site should be suitable for shallow footing support. The proposed structure footings may be designed utilizing an allowable bearing pressure of 2,500 psf for dead-plus-live loads. Footings should have a minimum embedment of 18 inches.

Groundwater Influence on Structures/Construction

During our field investigation, groundwater was encountered at depths of 6 to 12 feet below site grade. The historical high groundwater elevation for the site was determined to be 2 feet. Therefore, dewatering

and/or waterproofing may be required should structures or excavations extend below the groundwater table. If groundwater is encountered, our firm should be consulted prior to dewatering the site. Installation of a standpipe piezometer is suggested prior to construction should groundwater levels be a concern.

In addition to the groundwater level, if earthwork is performed during or soon after periods of precipitation, the subgrade soils may become saturated, “pump,” or not respond to densification techniques. Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material; or mixing the soil with an approved lime or cement product. Our firm should be consulted prior to implementing remedial measures to observe the unstable subgrade conditions and provide appropriate recommendations.

Site Preparation

General site clearing should include removal of vegetation; concrete and metal debris; existing utilities; structures including foundations; basement walls and floors; existing stockpiled soil; trees and associated root systems; rubble; rubbish; and any loose and/or saturated materials. Site stripping should extend to a minimum depth of 2 to 4 inches, or until all organics in excess of 3 percent by volume are removed. Deeper stripping may be required in localized areas. These materials will not be suitable for use as Engineered Fill. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas.

Approximately 1½ to 2½ feet of fill material was encountered within the borings drilled across the site. The fill material predominately consisted of clayey sand and sandy silty clay. The thickness and extent of fill material was determined based on limited test borings and visual observation. Thicker fill may be present at the site. Limited testing was performed on the fill soils during the time of our field and laboratory investigations. The limited testing indicates the fill soils had varying strength characteristics ranging from loosely placed to compacted. Therefore, it is recommended that the fill soils be excavated and stockpiled so that the native soils can be prepared properly. Over-excavation should extend to a minimum of 5 feet beyond structural elements. The fill material will be suitable for reuse as general Engineered Fill provided it is cleansed of excessive organics, debris, and fragments larger than 4 inches in maximum dimension.

The site is surrounded by agricultural land, residential developments and commercial developments. In addition, structures were previously located within the site. Associated with these developments are buried structures such, as utility lines that are located along the edges of the site and within the project site vicinity. Demolition activities should include proper removal of any buried structures. Any buried structures encountered during construction should be properly removed and/or relocated and the resulting excavations backfilled. Excavations, depressions, or soft and pliant areas extending below planned finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Soils Engineer. Any other buried structures should be removed in accordance with the recommendations of the Soils Engineer. The resulting excavations should be backfilled with Engineered Fill.

Trees are located within the site. Tree removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

It is recommended that following stripping, tree removal operations, fill removal operations and demolition activities, the upper 12 inches of native soils within the proposed building areas be excavated, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend a minimum of 5 feet beyond structural elements. Prior to backfilling, the bottom of the excavation should be proof rolled and observed by Krazan & Associates, Inc. to verify stability. Soft or pliant areas should be excavated to firm native ground. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation. Fill material should be compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Following stripping and fill removal operations, the exposed subgrade in exterior flatwork and pavement areas should be excavated/scarified to a minimum depth of 12 inches, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend a minimum of 2 feet beyond structural elements. This compaction effort should stabilize the surface soils and located any unsuitable or pliant areas not found during our field investigation.

It is recommended that the upper 36 inches of soil within proposed slab-on-grade and adjacent exterior flatwork areas consist of non-expansive or lime-treated Engineered Fill. The fill placement serves two functions: 1) it provides a uniform amount of soil, which will more evenly distribute the soil pressures and 2) it reduces moisture content fluctuation in the clayey material beneath the building area. The non-expansive fill material should be a well-graded silty sand or sandy silt soil. A clean sand or very sandy soil is not acceptable for this purpose. A sandy soil will allow the surface water to drain into the expansive clayey soil below, which may result in soil swelling. Imported Fill should be approved by the Soils Engineer prior to placement. The fill should be placed as specified as Engineered Fill. In addition, it is recommended conventional foundations and slabs be nominally reinforced to reduce cracking and vertical offsets.

The upper soils, during wet winter months, become very moist due to the absorptive characteristics of the soil. Earthwork operations performed during winter months may encounter very moist unstable soils, which may require removal to grade a stable building foundation. Project site winterization consisting of placement of aggregate base and protecting exposed soils during the construction phase should be performed.

A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Soils Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section and the Engineered Fill section.

Engineered Fill

The organic-free, on-site, upper native soils and fill material are predominately clayey sands, sandy clays, and silty clays. These clayey soils will not be suitable for re-use as non-expansive Engineered Fill. These clayey soils will be suitable for reuse for fill placement within the upper 36 inches of slab-on-grade and adjacent exterior flatwork areas, provided they are lime-treated. The preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be at or near optimum moisture-condition during mixing operations. Additional testing is recommended to determine the appropriate application rate of lime prior to placement. These clayey soils will be suitable for reuse as General Engineered Fill, provided they are cleansed of excessive organics, debris, and moisture-conditioned to at least 2 percent above optimum moisture. It is recommended that additional testing be performed on the on-site soils and fill material to evaluate the physical and index properties prior to reuse as Engineered Fill.

The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since he has complete control of the project site at that time.

Imported Fill material should be predominately non-expansive granular material with a plasticity index less than 10 and a UBC Expansion Index less than 15. Imported Fill should be free from rocks and lumps greater than 4 inches in diameter. All Imported Fill material should be submitted for approval to the Soils Engineer at least 48 hours prior to delivery to the site.

Fill soils should be placed in lifts approximately 6 inches thick, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and compacted to achieve at least 90 percent of maximum density based on ASTM Test Method D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

Drainage and Landscaping

The ground surface should slope away from building pad and pavement areas toward appropriate drop inlets or other surface drainage devices. In accordance with Section 1804 of the 2019 California Building Code, it is recommended that the ground surface adjacent to foundations be sloped a minimum of 5 percent for a minimum distance of 10 feet away from structures, or to an approved alternative means of drainage conveyance. Swales used for conveyance of drainage and located within 10 feet of foundations should be sloped a minimum of 2 percent. Impervious surfaces, such as pavement and adjacent exterior concrete flatwork, within 10 feet of building foundations should be sloped a minimum of 1 percent away from the structure. Drainage gradients should be maintained to carry all surface water to collection facilities and off-site. These grades should be maintained for the life of the project.

Slots or weep holes should be placed in drop inlets or other surface drainage devices in pavement areas to allow free drainage of adjoining base course materials. Cutoff walls should be installed at pavement edges adjacent to vehicular traffic areas these walls should extend to a minimum depth of 12 inches below pavement subgrades to limit the amount of seepage water that can infiltrate the pavements. Where cutoff walls are undesirable subgrade drains can be constructed to transport excess water away from planters to drainage interceptors. If cutoff walls can be successfully used at the site, construction of subgrade drains is considered unnecessary.

Utility Trench Backfill

Utility trenches should be excavated according to accepted engineering practices following OSHA (Occupational Safety and Health Administration) standards by a Contractor experienced in such work. The responsibility for the safety of open trenches should be borne by the Contractor. Traffic and vibration adjacent to trench walls should be reduced; cyclic wetting and drying of excavation side slopes should be avoided. Depending upon the location and depth of some utility trenches, groundwater flow into open excavations could be experienced, especially during or shortly following periods of precipitation.

Sandy soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavations. Shoring or sloping back trench sidewalls may be required within these sandy soils.

Utility trench backfill placed in or adjacent to buildings and exterior slabs should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. The utility trench backfill placed in pavement areas should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. Pipe bedding should be in accordance with pipe manufacturer's recommendations.

The Contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The Contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

Foundations

The proposed structure may be supported on a shallow foundation system bearing on non-expansive or lime-treated Engineered Fill. Spread and continuous footings can be designed for the following maximum allowable soil bearing pressures:

Load	Allowable Loading
Dead Load Only	1,875 psf
Dead-Plus-Live Load	2,500 psf
Total Load, Including Wind or Seismic Loads	3,325 psf

The footings should have a minimum depth of 18 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Footings should have a minimum width of 12 inches, regardless of load. Ultimate design of foundations and reinforcement should be performed by the project Structural Engineer.

The total soil movement is not expected to exceed 1 inch. Differential movement measured across a horizontal distance of 30 feet should be less than ½ inch. Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction movement may occur if the foundation soils are flooded or saturated.

The footing excavations should not be allowed to dry out any time prior to pouring concrete. It is recommended that footings be reinforced by at least one No. 4 reinforcing bar in both top and bottom.

Resistance to lateral footing displacement can be computed using an allowable friction factor of 0.3 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 250 pounds per cubic foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. A ½ increase in the above value may be used for short duration, wind, or seismic loads.

Floor Slabs and Exterior Flatwork

In areas that will utilize moisture-sensitive floor coverings, concrete slab-on-grade floors should be underlain by a water vapor retarder. The water vapor retarder should be installed in accordance with accepted engineering practice. The water vapor retarder should consist of a vapor retarder sheeting underlain by a minimum of 3 inches of compacted, clean, gravel of ¾-inch maximum size. To aid in concrete curing an optional 2 to 4 inches of granular fill may be placed on top of the vapor retarder. The granular fill should consist of damp clean sand with at least 10 to 30 percent of the sand passing the 100 sieve. The sand should be free of clay, silt, or organic material. Rock dust which is manufactured sand from rock crushing operations is typically suitable for the granular fill. This granular fill material should be compacted.

The floor slabs should be reinforced at a minimum with No. 3 reinforcement bars at 18 inches on-center each way within the middle one-third. Thicker floor slabs with increased concrete strength and reinforcement should be designed wherever large vehicular loads, heavy concentrated loads, heavy equipment, or machinery is anticipated.

The exterior floors should be poured separately in order to act independently of the walls and foundation system. All fills required to bring the building pads to grade should be Engineered Fills.

Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor can travel through the vapor membrane and penetrate the slab-on-grade. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To reduce moisture vapor intrusion, it is recommended that a vapor retarder be installed. It is recommended that the utility trenches within the structure be compacted, as specified in our report, to reduce the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the building is recommended. Positive drainage should be established away from the structure and should be maintained throughout the life of the structure. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed. In addition, ventilation of the structure (i.e. ventilation fans) is recommended to reduce the accumulation of interior moisture.

Lateral Earth Pressures and Retaining Walls

Walls retaining horizontal backfill and capable of deflecting a minimum of 0.1 percent of its height at the top may be designed using an equivalent fluid active pressure of 50 pounds per square foot per foot of depth. Walls that are incapable of this deflection or walls that are fully constrained against deflection may be designed for an equivalent fluid at-rest pressure of 70 pounds per square foot per foot per depth. Expansive soils should not be used for backfill against walls. The wedge of non-expansive backfill material should extend from the bottom of each retaining wall outward and upward at a slope of 2:1 (horizontal to vertical) or flatter. The stated lateral earth pressures do not include the effects of hydrostatic water pressures generated by infiltrating surface water that may accumulate behind the retaining walls; or loads imposed by construction equipment, foundations, or roadways.

Retaining and/or below grade walls should be drained with either perforated pipe encased in free-draining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic concrete or other suitable backfill to minimize surface drainage into the wall drain system. The aggregate should conform to Class 2 permeable materials graded in accordance with the CalTrans Standard Specifications (2018). Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.

Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The pipes should be placed no higher than 6 inches

above the heel of the wall in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Collector pipes may be either slotted or perforated. Slots should be no wider than 1/8 inch in diameter, while perforations should be no more than 1/4 inch in diameter. If retaining walls are less than 6 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 4-inch diameter holes (concrete walls) or unmortared head joints (masonry walls) and not be higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.

During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall or within a lateral distance equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

R-Value Test Results and Pavement Design

Two subgrade soil samples were obtained from the project site for R-value testing at the locations shown on the attached site plan. The samples were tested in accordance with the State of California Materials Manual Test Designation 301. The results of the tests are as follows:

Sample	Depth	Description	R-Value at Equilibrium
1	12-24"	Sandy Clay (CL)	Less than 5
2	12-24"	Sandy Clay (CL)	Less than 5

The test results are low and indicate poor subgrade support characteristics under dynamic traffic loads. The following table shows the recommended pavement sections for various traffic indices.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Class III Aggregate Subbase	Compacted Subgrade**
4.0	2.0"	8.5"	--	12.0"
4.0	2.0"	4.5"	4.5"	12.0"
4.5	2.5"	9.0"	--	12.0"
4.5	2.5"	4.0"	5.5"	12.0"
5.0	2.5"	11.0"	--	12.0"
5.0	2.5"	5.0"	6.5"	12.0"
5.5	3.0"	11.5"	--	12.0"
5.5	3.0"	5.0"	7.0"	12.0"
6.0	3.0"	13.5"	--	12.0"
6.0	3.0"	6.5"	8.0"	12.0"

6.5	3.5"	14.0"	--	12.0"
6.5	3.5"	6.0"	9.0"	12.0"
7.0	4.0"	15.5"	--	12.0"
7.0	4.0"	6.5"	10.0"	12.0"
7.5	4.0"	17.0"	--	12.0"
7.5	4.0"	7.5"	10.5"	12.0"

* 95% compaction based on ASTM Test Method D1557 or CAL 216
** 90% compaction based on ASTM Test Method D1557 or CAL 216

The following table shows the recommended pavement sections for various traffic indices based on the upper 12 inches of subgrade soil being lime-treated with 5 percent Calcium Quicklime.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Lime-Treated Compacted Subgrade**
4.0	2.0"	4.0"	12.0"
4.5	2.5"	4.0"	12.0"
5.0	2.5"	4.0"	12.0"
5.5	3.0"	4.0"	12.0"
6.0	3.0"	5.0"	12.0"
6.5	3.5"	5.0"	12.0"
7.0	4.0"	6.0"	12.0"
7.5	4.0"	6.0"	12.0"

* 95% compaction based on ASTM Test Method D1557 or CAL 216
** 90% compaction based on ASTM Test Method D1557 or CAL 216

If traffic indices are not available, an estimated (typical value) index of 4.5 may be used for light automobile traffic, and an index of 7.0 may be used for light truck traffic.

The following recommendations are for light-duty and heavy-duty Portland Cement Concrete Pavement Sections based on the design procedures developed by the Portland Cement Association.

**PORTLAND CEMENT PAVEMENT
LIGHT DUTY**

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
4.5	6.0"	5.0"	12.0"

HEAVY DUTY

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
7.0	7.0"	6.0"	12.0"

* 95% compaction based on ASTM Test Method D1557 or CAL 216

** 90% compaction based on ASTM Test Method D1557 or CAL 216

***Minimum Compressive Strength of 3000 psi

It is recommended that any uncertified fill material encountered within pavement areas be removed and/or recompacted. The fill material should be moisture-conditioned to near optimum moisture and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. As an alternative, the Owner may elect not to recompact the existing fill within paved areas. However, the Owner should be aware that the paved areas may settle which may require annual maintenance. At a minimum, it is recommended that the upper 12 inches of subgrade soil be moisture-conditioned as necessary and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Seismic Parameters – 2019 California Building Code

The Site Class per Section 1613 of the 2019 California Building Code (2019 CBC) and ASCE 7-16, Chapter 20 is based upon the site soil conditions. It is our opinion that a Site Class D is most consistent with the subject site soil conditions. For seismic design of the structures based on the seismic provisions of the 2019 CBC, we recommend the following parameters:

Seismic Item	Value	CBC Reference
Site Class	D	Section 1613.2.2
Site Coefficient F_a	1.000	Table 1613.2.3 (1)
S_s	2.194	Section 1613.2.1
S_{MS}	2.194	Section 1613.2.3
S_{DS}	1.463	Section 1613.2.4
Site Coefficient F_v	1.700	Table 1613.2.3 (2)
S_1	0.791	Section 1613.2.1
S_{M1}	1.345	Section 1613.2.3
S_{D1}	0.896	Section 1613.2.4
T_s	0.613	Section 1613.2

* Based on Equivalent Lateral Force (ELF) Design Procedure being used.

Soil Cement Reactivity

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete (or stucco) and the soil. HUD/FHA and CBC have developed criteria for evaluation of sulfate levels and how they relate to cement reactivity with soil and/or water.

Soil samples were obtained from the site and tested in accordance with State of California Materials Manual Test Designation 417. The sulfate concentrations detected from these soil samples were greater than 0.02 percent and are greater than the maximum allowable values established by HUD/FHA and CBC. Therefore, it is recommended that a Type II cement be used within the concrete to compensate for sulfate reactivity with the cement.

Chemical tests were performed on a near-surface soil sample. The test results indicate that the soils are moderately corrosive to buried metal objects. Therefore, buried metal should be protected using either non-corrosive backfill, protective coatings, wrappings, sacrificial anodes, or a combination of these methods in accordance with the manufacturer's recommendations.

Compacted Material Acceptance

Compaction specifications are not the only criteria for acceptance of the site grading or other such activities. However, the compaction test is the most universally recognized test method for assessing the performance of the Grading Contractor. The numerical test results from the compaction test cannot be used to predict the engineering performance of the compacted material. Therefore, the acceptance of compacted materials will also be dependent on the stability of that material. The Soils Engineer has the option of rejecting any compacted material regardless of the degree of compaction if that material is considered to be unstable or if future instability is suspected. A specific example of rejection of fill material passing the required percent compaction is a fill which has been compacted with an in situ moisture content significantly less than optimum moisture. This type of dry fill (brittle fill) is susceptible to future settlement if it becomes saturated or flooded.

Testing and Inspection

A representative of Krazan & Associates, Inc. should be present at the site during the earthwork activities to confirm that actual subsurface conditions are consistent with the exploratory fieldwork. This activity is an integral part of our service, as acceptance of earthwork construction is dependent upon compaction testing and stability of the material. This representative can also verify that the intent of these recommendations is incorporated into the project design and construction. Krazan & Associates, Inc. will not be responsible for grades or staking, since this is the responsibility of the Prime Contractor.

LIMITATIONS

Soils Engineering is one of the newest divisions of Civil Engineering. This branch of Civil Engineering is constantly improving as new technologies and understanding of earth sciences advance. Although your site was analyzed using the most appropriate and most current techniques and methods, undoubtedly there will be substantial future improvements in this branch of engineering. In addition to advancements in the field of Soils Engineering, physical changes in the site, either due to excavation or fill placement, new agency regulations, or possible changes in the proposed structure after the soils report is completed may require the soils report to be professionally reviewed. In light of this, the

Owner should be aware that there is a practical limit to the usefulness of this report without critical review. Although the time limit for this review is strictly arbitrary, it is suggested that 2 years be considered a reasonable time for the usefulness of this report.

Foundation and earthwork construction is characterized by the presence of a calculated risk that soil and groundwater conditions have been fully revealed by the original foundation investigation. This risk is derived from the practical necessity of basing interpretations and design conclusions on limited sampling of the earth. The recommendations made in this report are based on the assumption that soil conditions do not vary significantly from those disclosed during our field investigation. If any variations or undesirable conditions are encountered during construction, the Soils Engineer should be notified so that supplemental recommendations may be made.

The conclusions of this report are based on the information provided regarding the proposed construction. If the proposed construction is relocated or redesigned, the conclusions in this report may not be valid. The Soils Engineer should be notified of any changes so the recommendations may be reviewed and re-evaluated.

This report is a Geotechnical Engineering Investigation with the purpose of evaluating the soil conditions in terms of foundation design. The scope of our services did not include any Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands. Any statements, or absence of statements, in this report or on any boring log regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices and a degree of conservatism deemed proper for this project. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (916) 564-2200.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

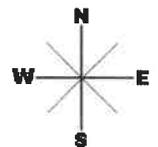


David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

DRJ:ht



- APPROXIMATE BORING LOCATION
- ▲ APPROXIMATE R-VALUE LOCATION



SITE MAP Napa Cove Apartments Broadway Street American Canyon, California	Scale: NTS	Date: May 2020	
	Drawn by: HT	Approved by: DJ	
	Project No. 032-21058	Figure No. 1	

APPENDIX A

FIELD AND LABORATORY INVESTIGATIONS

Field Investigation

The field investigation consisted of a surface reconnaissance and a subsurface exploratory program. Six 4½-inch exploratory borings were advanced. The boring locations are shown on the site plan.

The soils encountered were logged in the field during the exploration and, with supplementary laboratory test data, are described in accordance with the Unified Soil Classification System.

Modified standard penetration tests and standard penetration tests were performed at selected depths. These tests represent the resistance to driving a 2½-inch and 1½-inch diameter split barrel sampler, respectively. The driving energy was provided by a hammer weighing 140 pounds falling 30 inches. Relatively undisturbed soil samples were obtained while performing this test. Bag samples of the disturbed soil were obtained from the auger cuttings. The modified standard penetration tests are identified in the sample type on the boring logs with a full shaded in block. The standard penetration tests are identified in the sample type on the boring logs with half of the block shaded. All samples were returned to our Clovis laboratory for evaluation.

Laboratory Investigation

The laboratory investigation was programmed to determine the physical and mechanical properties of the foundation soil underlying the site. Test results were used as criteria for determining the engineering suitability of the surface and subsurface materials encountered.

In-situ moisture content, dry density, consolidation, direct shear and sieve analysis tests were completed for the undisturbed samples representative of the subsurface material. Atterberg limits, expansion index and R-value tests were completed for select bag samples obtained from auger cuttings. These tests, supplemented by visual observation, comprised the basis for our evaluation of the site material.

The logs of the exploratory borings and laboratory determinations are presented in this Appendix.

Log of Boring B1

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-1

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 10 Feet

At Completion: 6 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)				
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.								
							20	40	60	10	20	30	40	
0		Ground Surface												
0 - 2		SANDY SILTY CLAY (CH) FILL, fine-grained; dark brown, moist, drills easily												
2 - 4		SILTY SANDY CLAY (CH) Very stiff, fine-grained; dark brown, moist, drills easily	100.3	19.3		23								
4 - 6		SILTY SANDY CLAY (CL) Very stiff, fine-grained; light brown, moist, drills easily ▼ Saturated below 6 feet	111.2	18.5		36								
6 - 8		Firm below 8½ feet												
8 - 10		▼												
10 - 12		Firm below 8½ feet	97.6	25.8		6								
12 - 14		Very stiff, light brown and white below 13 feet												
14 - 16		Very stiff, light brown and white below 13 feet	106.8	18.9		17								
16 - 18		Firm with trace CALICHE nodules below 19 feet												
18 - 20		Firm with trace CALICHE nodules below 19 feet												

Drill Method: Hollow Stem

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 50 Feet

Log of Boring B1

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-1

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 10 Feet

At Completion: 6 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)			
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.							
							20	40	60	10	20	30	40
22		Very stiff below 24 feet	99.8	27.1		7							
26	106.7		20.2		21								
30	99.2		22.5		20								
36	105.3		20.6		15								
40													

Drill Method: Hollow Stem

Drill Date: 4-23-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 50 Feet

Sheet: 2 of 3

368

Log of Boring B2

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-2

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 9½ Feet

At Completion: 7 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)				
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.								
							20	40	60	10	20	30	40	
0		Ground Surface												
0		CLAYEY SAND (SC) FILL, fine- to medium-grained; brown, moist, drills easily												
2		SILTY CLAY (CH) Stiff; dark brown, moist, drills easily	98.8	12.9		22								
4		Very stiff and dark brown below 5 feet												
6		100.7	19.8		36									
6		▼ Saturated below 7 feet												
10		CLAYEY SAND (SC) Medium dense, fine- to medium-grained; brown, saturated, drills easily	110.5	19.2		21								
14		SILTY CLAY (CL) Stiff; brown, saturated, drills easily												
16		110.2	16.7		18									
18														
20														

Drill Method: Solid Flight

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 20 Feet

Log of Boring B3

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-3

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 6½ Feet

At Completion: 6½ Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)				
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.								
							20	40	60	10	20	30	40	
0		Ground Surface												
0		CLAYEY SAND (SC) FILL, fine- to medium-grained; dark brown, moist, drills easily												
2		SILTY CLAY (CH) Very stiff; dark brown, moist, drills easily	100.0	21.1		24								
4		Olive-brown below 4 feet												
6		Saturated below 6½ feet	104.7	18.6		30								
10		End of Borehole												
12														
14														
16														
18														
20														

Drill Method: Solid Flight

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 10 Feet

Sheet: 1 of 1

371

Log of Boring B4

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-4

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 12 Feet

At Completion: 6¾ Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.		
0		Ground Surface						
0 - 2		CLAYEY SAND (SC) FILL, fine- to medium-grained; dark brown, moist, drills easily						
2 - 4		SILTY CLAY (CH) Very stiff; dark brown, moist, drills easily	109.8	17.0		33	■	
4 - 6		CLAYEY SAND (SC) Medium dense, fine- to medium-grained; brown, moist, drills easily	104.7	17.1		32	■	
6 - 8		▼ Saturated below 6¾ feet						
8 - 12		SILTY CLAY (CL) Very stiff; olive-brown, saturated, drills easily						
12 - 16		▽ Stiff with trace CALICHE below 12 feet						
16 - 18			111.5	19.0		16	■	
18 - 20								

Drill Method: Solid Flight

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 20 Feet

Sheet: 1 of 1

372

Log of Boring B5

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-5

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 7 Feet

At Completion: 7 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)				
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.								
							20	40	60	10	20	30	40	
0		Ground Surface												
0		SILTY CLAY (CL) FILL, with trace SAND; dark brown, moist, drills easily												
2		SILTY CLAY (CH) Very stiff; dark brown, moist, drills easily	105.2	18.9		23								
4		With trace fine- to medium-grained SAND and olive-brown below 4 feet												
6		108.6	19.3		31									
6		Saturated below 7 feet												
10		End of Borehole												
12														
14														
16														
18														
20														

Drill Method: Solid Flight

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 10 Feet

Sheet: 1 of 1

373

Log of Boring B6

Project: American Canyon Apartments

Project No: 032-20015

Client:

Figure No.: A-6

Location: Broadway Street near Antonia Avenue, American Canyon, California

Logged By: Wayne Andrade

Depth to Water>

Initial: 9 Feet

At Completion: 7½ Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft			Water Content (%)				
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.								
							20	40	60	10	20	30	40	
0		Ground Surface												
0 - 2		CLAYEY SAND (SC) FILL, fine- to medium-grained; dark brown, moist, drills easily												
2 - 4		SILTY CLAY (CL) Stiff; dark brown, moist, drills easily				18								
4 - 6		Very stiff and olive-brown below 4 feet												
6			103.7	22.2		30					■			
8		 Saturated below 7½ feet 												
8			110.0	17.9		32					■			
10 - 16		End of Borehole												

Drill Method: Solid Flight

Drill Date: 4-30-20

Drill Rig: CME 45C-1

Krazan and Associates

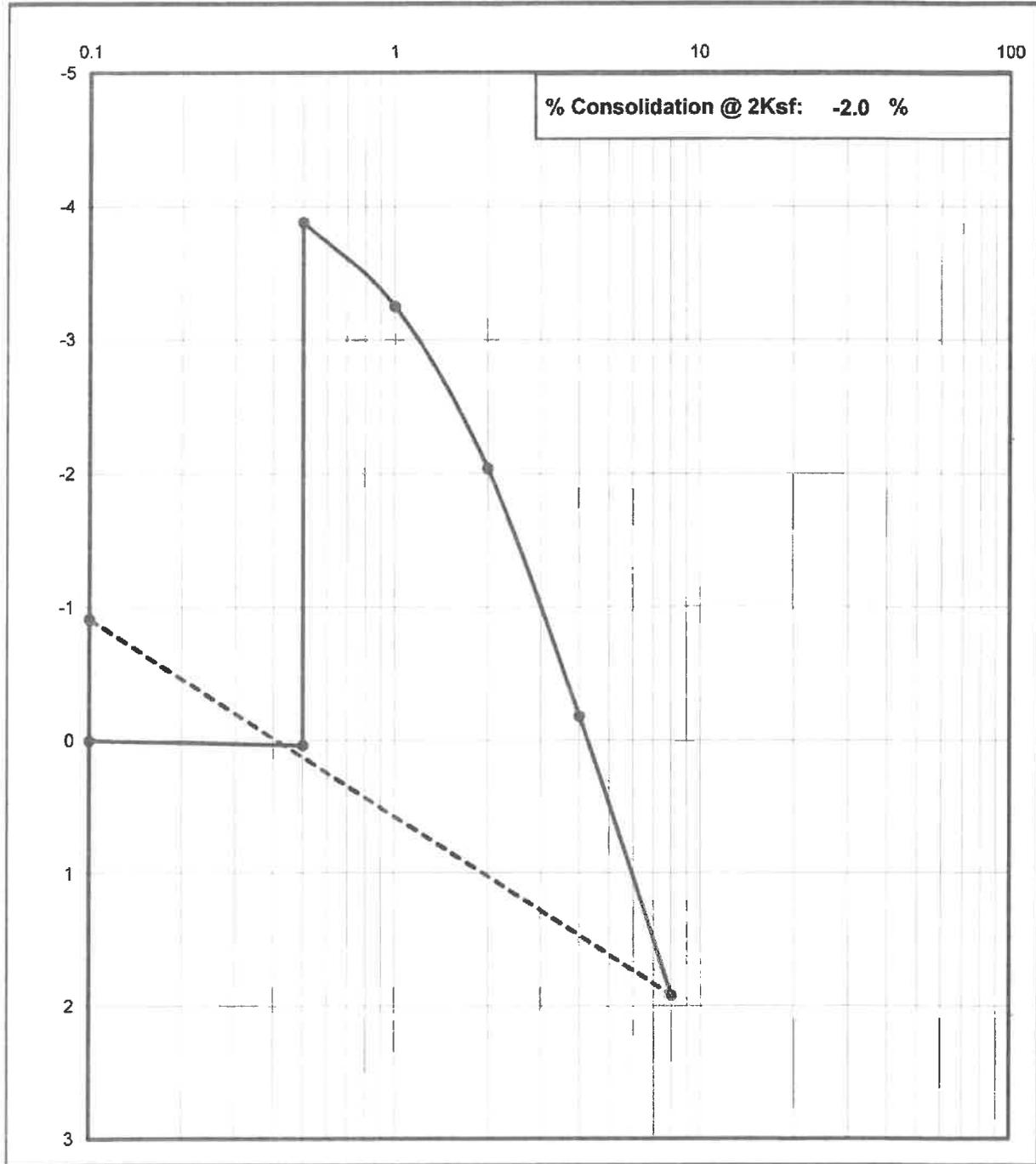
Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 15 Feet

Consolidation Test

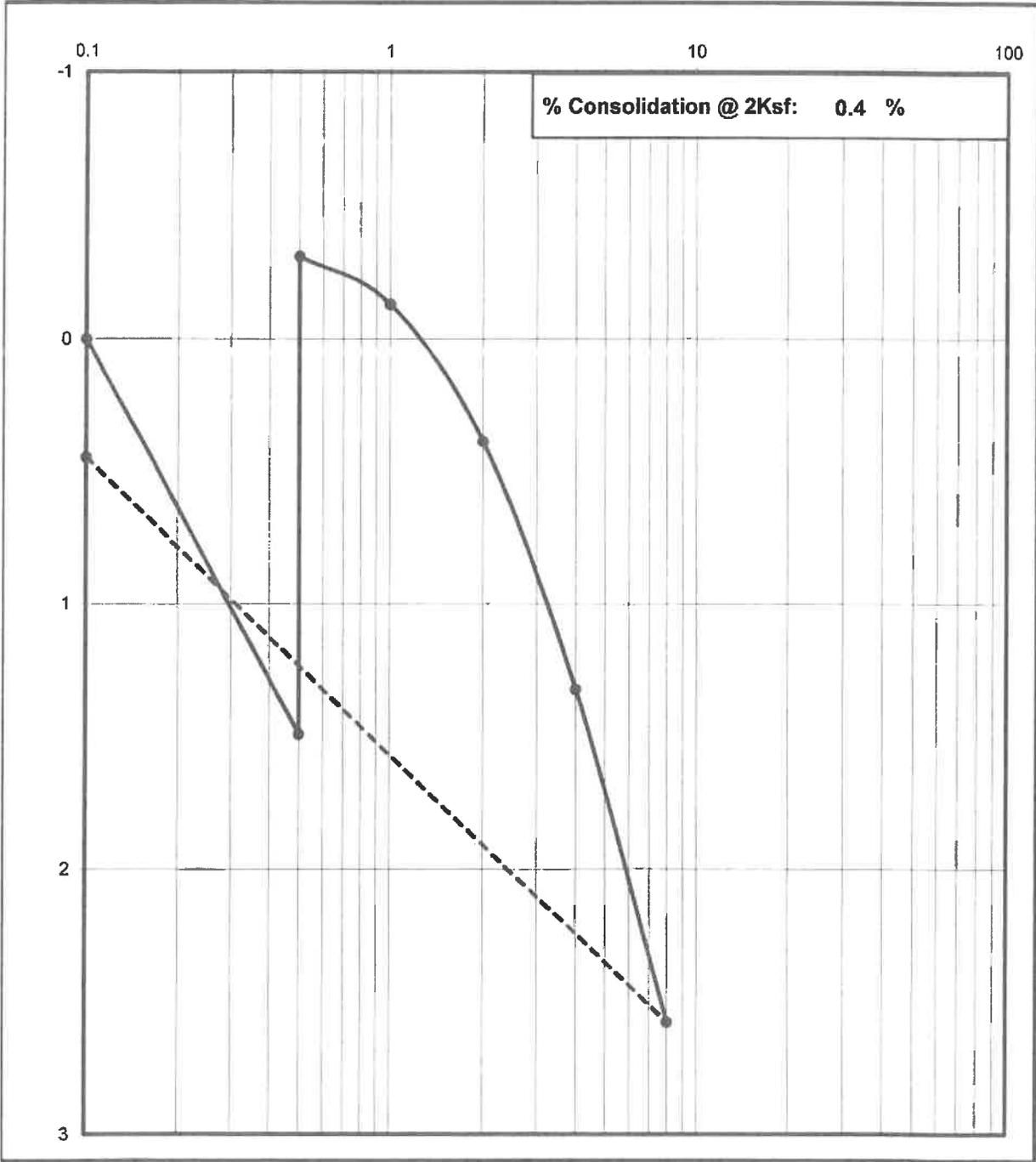
Project No	Boring No. & Depth	Date	Soil Classification
032-20015	B2 @ 2-3'	5/20/2020	CH w/ grvl



Krazan Testing Laboratory

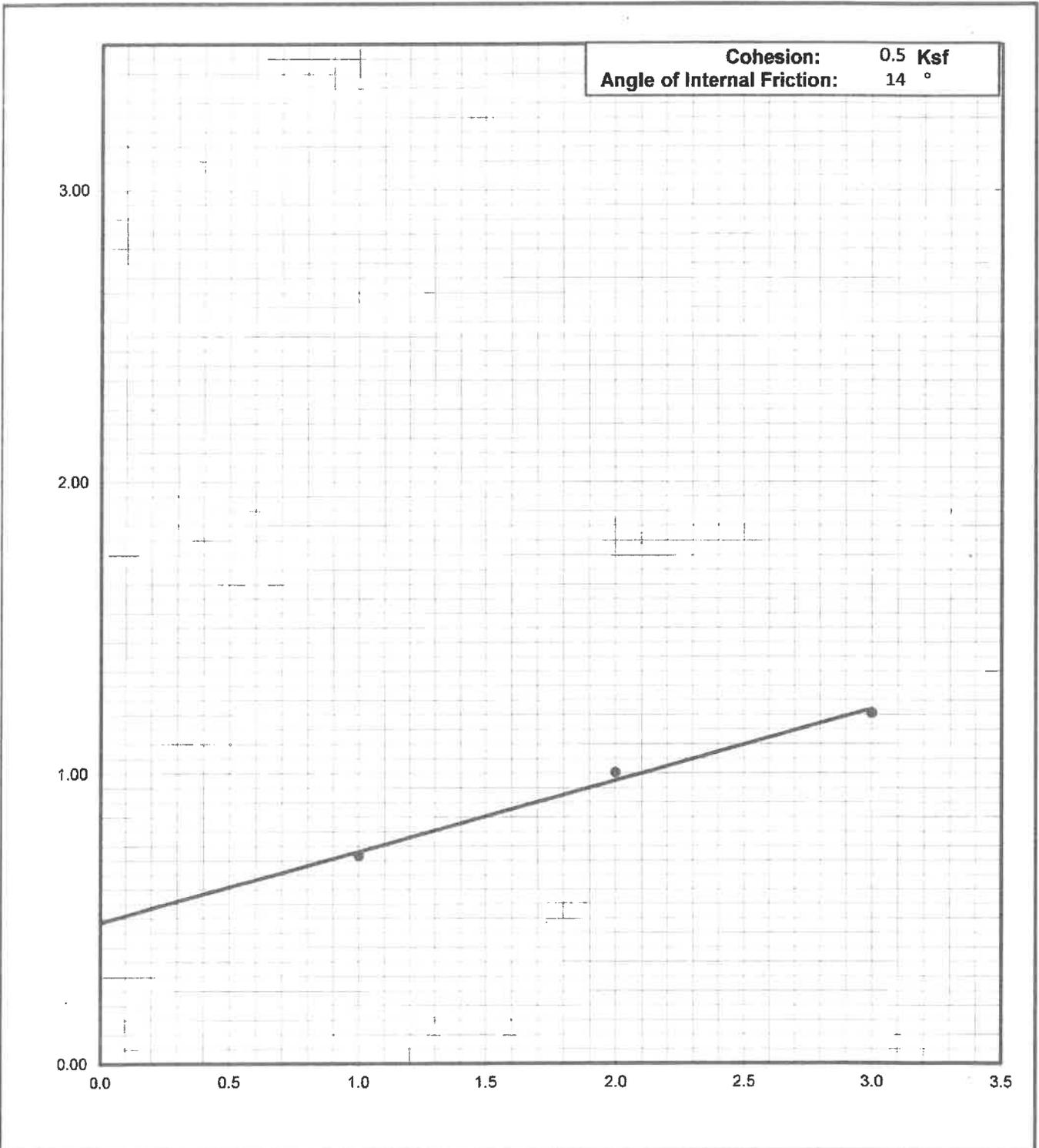
Consolidation Test

Project No	Boring No. & Depth	Date	Soil Classification
032-20015	B6 @ 5-6'	5/20/2020	CL



Shear Strength Diagram (Direct Shear)
ASTM D - 3080 / AASHTO T - 236

Project Number	Boring No. & Depth	Soil Type	Date
032-20015	B1 @ 2-3'	CH	5/20/2020

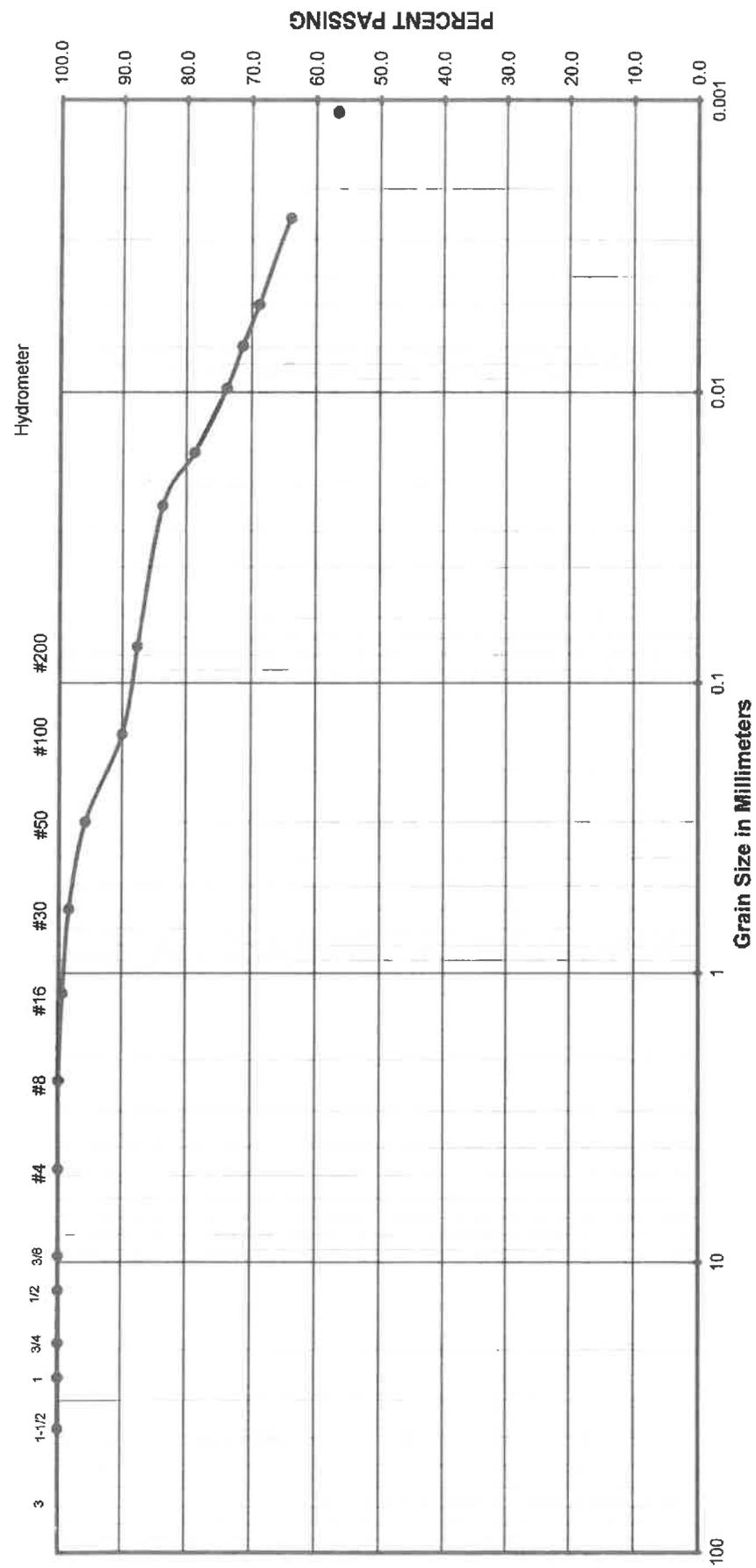


Krazan Testing Laboratory

Grain Size Analysis

U.S. Standard Sieve Numbers

Sieve Openings in Inches



Gravel		Sand			Silt or Clay	
		Fine	Coarse	Medium	Fine	

(Unified Soils Classification)

Project Name: American Canyon Apartments
 Project Number: 032-20015
 Soil Classification: CH
 Sample Number: X1 @ 0-4'

Krazan Testing Laboratory

Sieve Analysis

Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/20/2020
 Sample Location : X1 @ 0-4'
 Soil Classification : CH

Wet Weight	:	50.00
Dry Weight	:	50.00
Moisture Content	:	0%

Sieves Size/Number	Sieve Size, mm	Retained Weight	Retained. %	Cum % Retained	Cum. % Passing.
1-1/2"	37.50				100.0
1"	25.00				100.0
3/4"	19.00				100.0
1/2"	12.50				100.0
3/8"	9.50				100.0
#4	4.75				100.0
#8	2.36				100.0
#16	1.18	0.3	0.6	0.6	99.4
#30	0.60	0.5	1.0	1.6	98.4
#50	0.30	1.3	2.6	4.2	95.8
#100	0.15	2.9	5.8	10.0	90.0
#200	0.08	1.2	2.4	12.4	87.6

Hydrometer Analysis

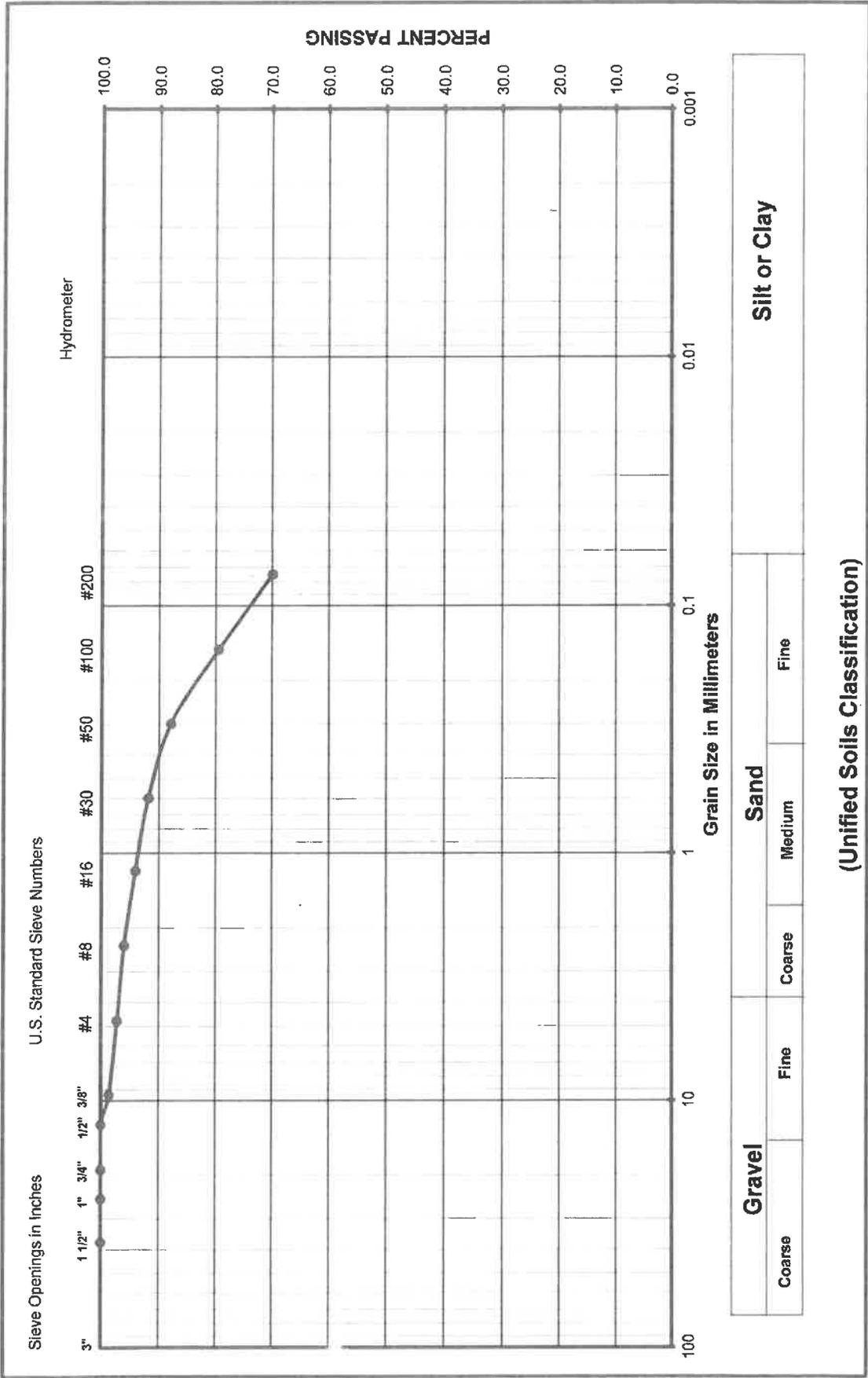
Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/20/2020
 Sample Location : X1 @ 0-4'
 Soil Classification : CH

Dry Weight Used	65.4 g
Temperature	20.0 C
Soil Specific Gravity	2.65
Solution Spec. Grav.	1.003
K Value	0.01365
Correction Factor	0.00000

Elapsed Time (min)	Hydro. Reading	Hydro. Corrected	% Passing	Particle Diameter
2	1.037	1.037	83.6	0.0246
5	1.035	1.035	78.7	0.0162
15	1.033	1.033	73.8	0.0097
30	1.032	1.032	71.3	0.0070
60	1.031	1.031	68.9	0.0050
250	1.029	1.029	64.0	0.0025
1440	1.026	1.026	56.6	0.0011

Particle Diameter	Percent Passing
0.005	68.9
0.002	61.2
0	NA

Grain Size Analysis



Gravel		Sand			Silt or Clay	
		Fine	Coarse	Medium		

(Unified Soils Classification)

Project Name
 Project Number
 Soil Classification
 Sample Number

American Canyon Apartments
 032-20015
 CH w/ grvl
 B2 @ 2-3'

Expansion Index Test

ASTM D - 4829

Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/20/2020
 Sample location/ Depth : X1 @ 0-4'
 Sample Number : X1
 Soil Classification : CH

Trial #	1	2	3
Weight of Soil & Mold, gms	735.5		
Weight of Mold, gms	367.6		
Weight of Soil, gms	367.9		
Wet Density, Lbs/cu.ft.	111.0		
Weight of Moisture Sample (Wet), gms	200.0		
Weight of Moisture Sample (Dry), gms	175.5		
Moisture Content, %	14.0		
Dry Density, Lbs/cu.ft.	97.4		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	51.6		

Time	Initial	30 min	1 hr	6hrs	12 hrs	24 hrs
Dial Reading	0	--	--	--	--	0.1533

Expansion Index_{measured} = 153.3

Expansion Index = 153

Exp. Index	Potential Exp.
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
>130	Very High

Expansion Index Test

ASTM D - 4829

Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/20/2020
 Sample location/ Depth : X2 @ 4-6'
 Sample Number : X2
 Soil Classification : CH

Trial #	1	2	3
Weight of Soil & Mold, gms	746.5		
Weight of Mold, gms	368.8		
Weight of Soil, gms	377.7		
Wet Density, Lbs/cu.ft.	113.9		
Weight of Moisture Sample (Wet), gms	200.0		
Weight of Moisture Sample (Dry), gms	177.9		
Moisture Content, %	12.4		
Dry Density, Lbs/cu.ft.	101.3		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	50.6		

Time	Initial	30 min	1 hr	6hrs	12 hrs	24 hrs
Dial Reading	0	--	--	--	--	0.1342

Expansion Index_{measured} = 134.2

Expansion Index = 134

Expansion Potential Table	
Exp. Index	Potential Exp.
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
>130	Very High

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number: X1

Sample Location: 0-4'

Sample Description: CH

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	25.13	25.42		27.10	27.37	
Weight of Dry Soil & Tare (g)	23.66	23.71		22.59	22.36	
Weight of Tare (g)	15.70	14.29		14.43	13.21	
Weight of water (g)	1.48	1.71		4.51	5.01	
Weight of Dry Soil (g)	7.96	9.42		8.16	9.16	
Water Content (% of dry wt.)	18.5%	18.2%		55.2%	54.7%	
Number of Blows				25	25	

Plastic Limit : 18

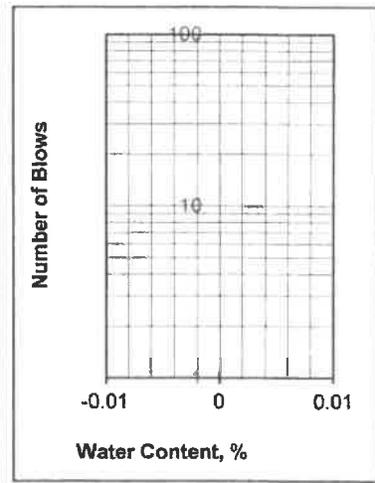
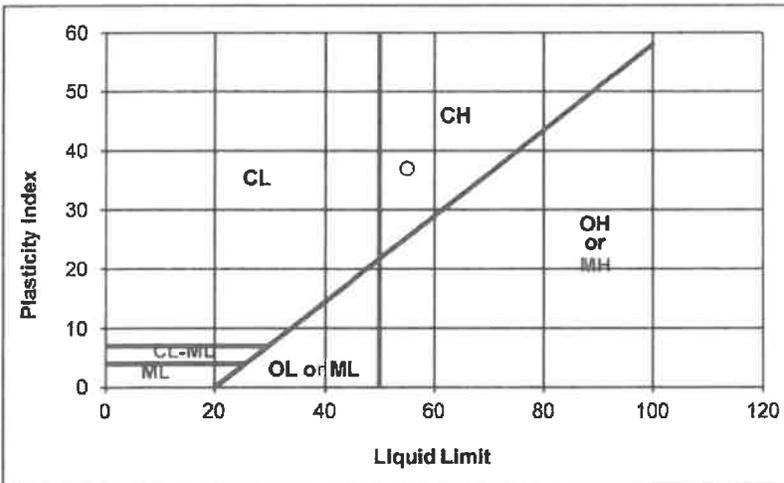
Liquid Limit : 55

Plasticity Index : 37

Unified Soil Classification : CH

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 5-6'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	24.60	27.38		24.35	26.49	33.52
Weight of Dry Soil & Tare (g)	23.14	26.08		21.31	22.86	28.04
Weight of Tare (g)	13.21	17.05		13.86	14.29	15.65
Weight of water (g)	1.46	1.30		3.05	3.63	5.48
Weight of Dry Soil (g)	9.93	9.03		7.45	8.57	12.39
Water Content (% of dry wt.)	14.7%	14.4%		40.9%	42.4%	44.3%
Number of Blows				35	27	20

Plastic Limit : 15

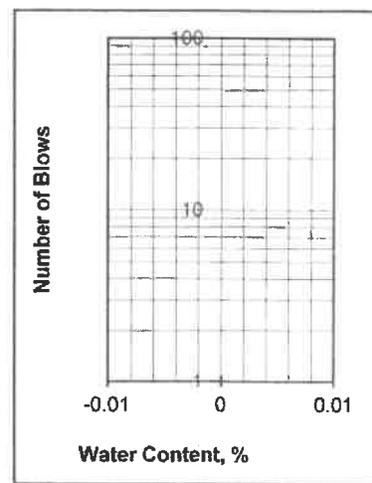
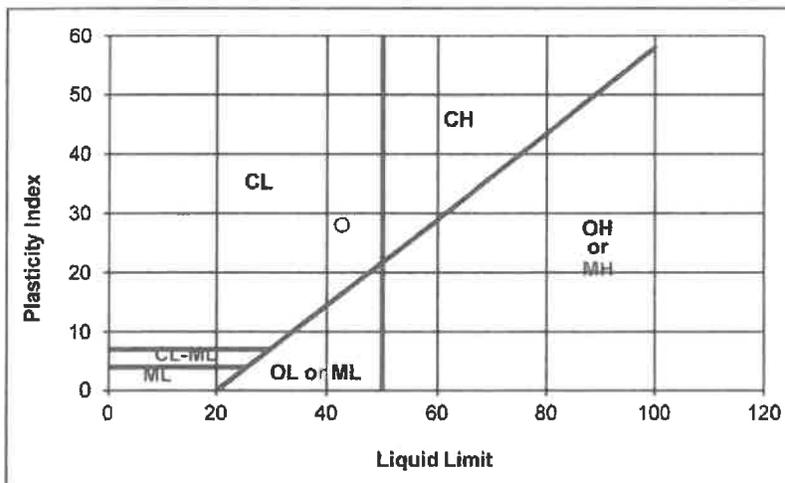
Liquid Limit : 43

Plasticity Index : 28

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 10-11'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	28.67	28.86		26.78	25.71	
Weight of Dry Soil & Tare (g)	26.40	26.41		23.20	22.57	
Weight of Tare (g)	13.54	12.77		13.29	13.86	
Weight of water (g)	2.27	2.45		3.58	3.14	
Weight of Dry Soil (g)	12.86	13.64		9.91	8.71	
Water Content (% of dry wt.)	17.7%	17.9%		36.2%	36.1%	
Number of Blows				25	25	

Plastic Limit : 18

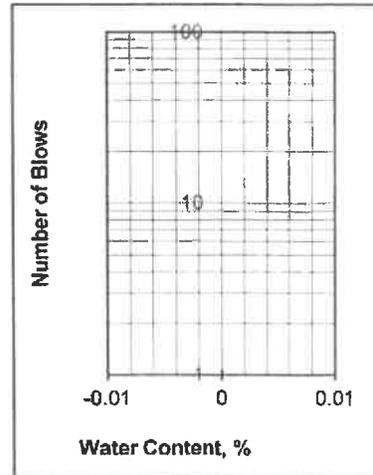
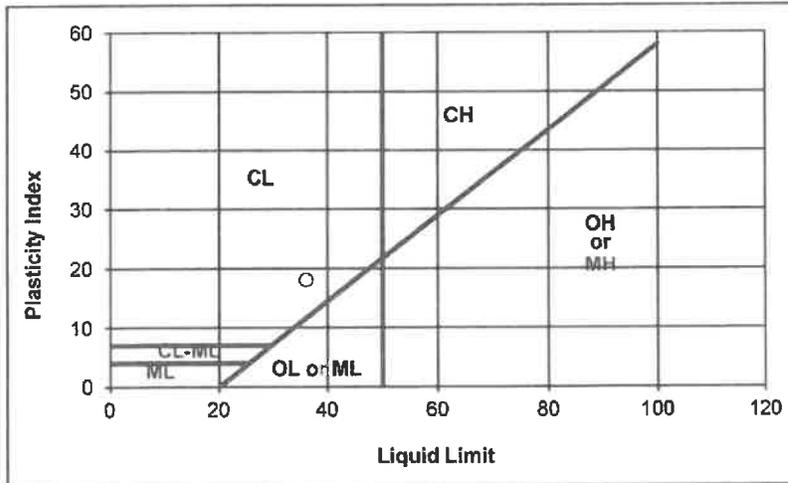
Liquid Limit : 36

Plasticity Index : 18

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 15-16'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	24.71	23.61		26.55	24.23	
Weight of Dry Soil & Tare (g)	23.73	22.62		23.27	21.22	
Weight of Tare (g)	15.69	14.27		14.69	13.20	
Weight of water (g)	0.99	0.99		3.28	3.02	
Weight of Dry Soil (g)	8.04	8.34		8.58	8.02	
Water Content (% of dry wt.)	12.3%	11.9%		38.2%	37.6%	
Number of Blows				25	25	

Plastic Limit : 12

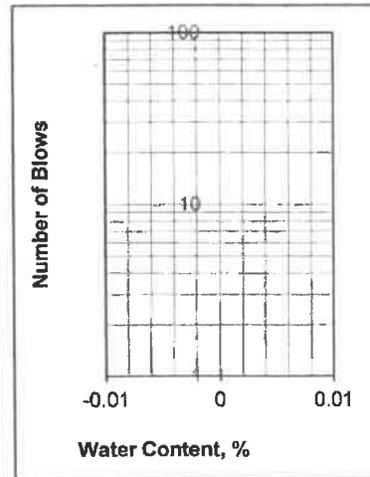
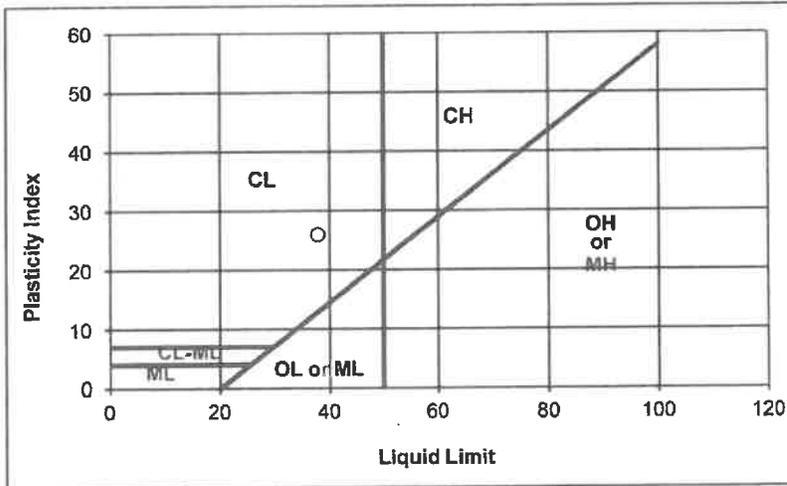
Liquid Limit : 38

Plasticity Index : 26

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 20-21'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	29.34	25.95		29.39	37.03	
Weight of Dry Soil & Tare (g)	27.76	24.33		24.95	30.71	
Weight of Tare (g)	17.06	13.87		14.27	15.68	
Weight of water (g)	1.58	1.61		4.44	6.32	
Weight of Dry Soil (g)	10.70	10.46		10.68	15.03	
Water Content (% of dry wt.)	14.7%	15.4%		41.5%	42.0%	
Number of Blows				25	25	

Plastic Limit : 15

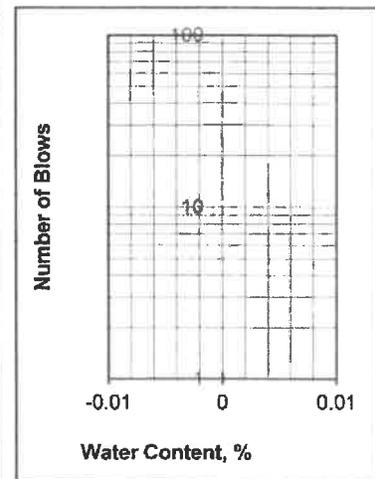
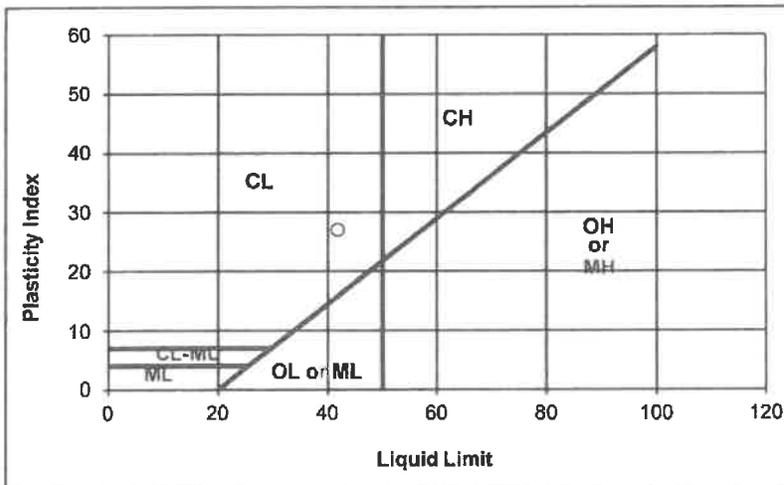
Liquid Limit : 42

Plasticity Index : 27

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 25-26'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	21.52	24.74		30.38	32.67	
Weight of Dry Soil & Tare (g)	20.49	23.85		26.63	28.10	
Weight of Tare (g)	13.47	16.99		15.62	14.70	
Weight of water (g)	1.04	0.89		3.75	4.58	
Weight of Dry Soil (g)	7.02	6.86		11.01	13.40	
Water Content (% of dry wt.)	14.8%	12.9%		34.0%	34.1%	
Number of Blows				25	25	

Plastic Limit : 14

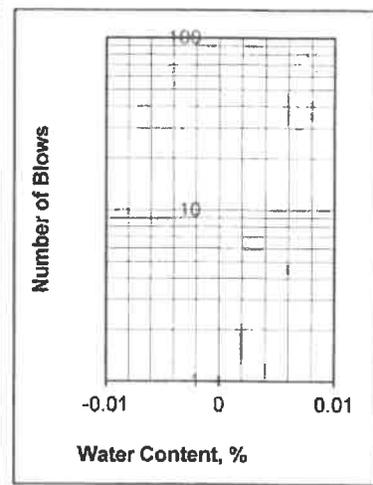
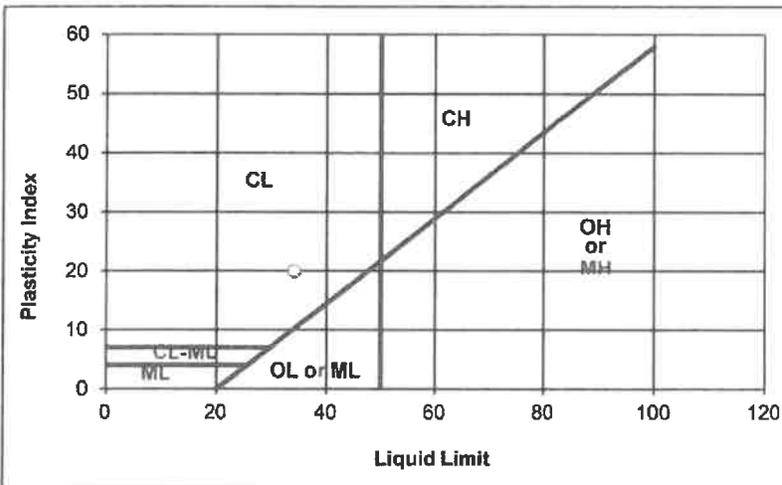
Liquid Limit : 34

Plasticity Index : 20

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 30-31'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	30.24	24.89		30.92	30.31	
Weight of Dry Soil & Tare (g)	28.78	23.55		26.86	26.04	
Weight of Tare (g)	17.06	13.47		16.98	15.60	
Weight of water (g)	1.46	1.34		4.06	4.27	
Weight of Dry Soil (g)	11.72	10.08		9.89	10.44	
Water Content (% of dry wt.)	12.5%	13.3%		41.1%	40.9%	
Number of Blows				25	25	

Plastic Limit : 13

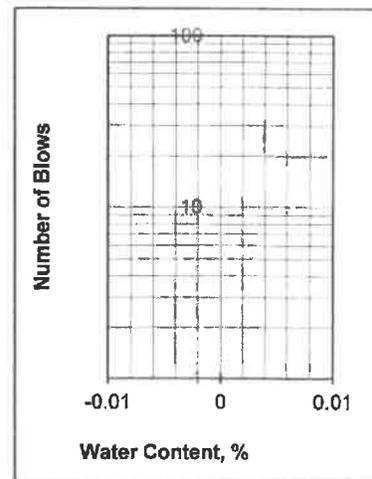
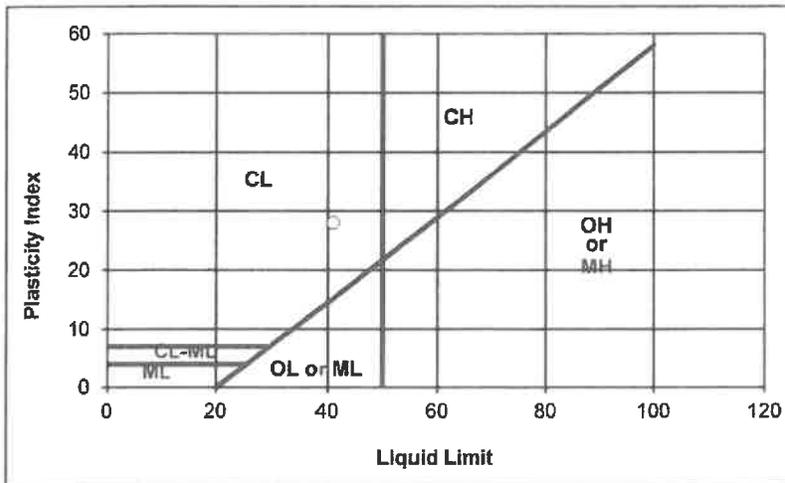
Liquid Limit : 41

Plasticity Index : 28

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 35-36'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	23.34	27.21		27.20	31.17	
Weight of Dry Soil & Tare (g)	22.12	25.96		23.49	26.31	
Weight of Tare (g)	13.25	17.06		13.74	13.48	
Weight of water (g)	1.22	1.24		3.72	4.85	
Weight of Dry Soil (g)	8.87	8.90		9.75	12.83	
Water Content (% of dry wt.)	13.8%	14.0%		38.1%	37.8%	
Number of Blows				25	25	

Plastic Limit : 14

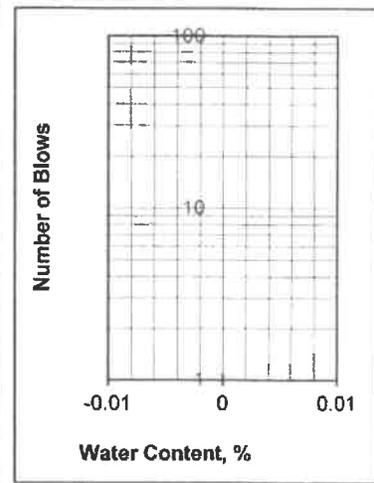
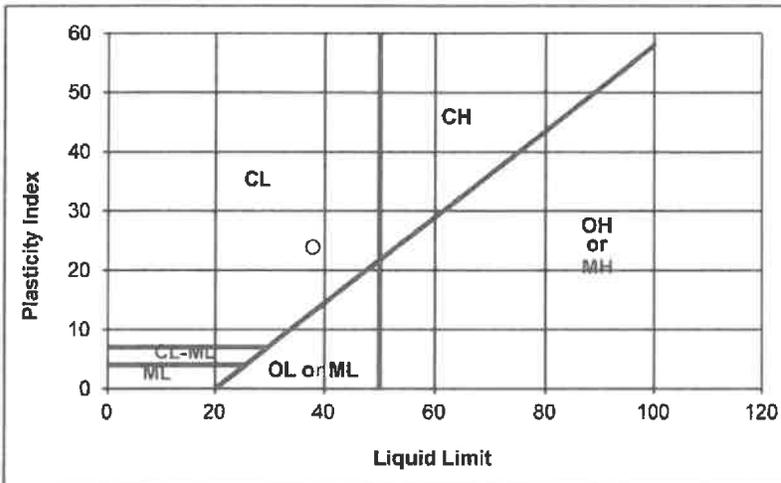
Liquid Limit : 38

Plasticity Index : 24

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 40-41'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	25.31	21.74		31.90	28.97	
Weight of Dry Soil & Tare (g)	24.33	20.79		28.01	25.47	
Weight of Tare (g)	17.08	13.48		16.97	15.62	
Weight of water (g)	0.98	0.95		3.89	3.50	
Weight of Dry Soil (g)	7.25	7.31		11.04	9.86	
Water Content (% of dry wt.)	13.6%	13.0%		35.2%	35.5%	
Number of Blows				25	25	

Plastic Limit : 13

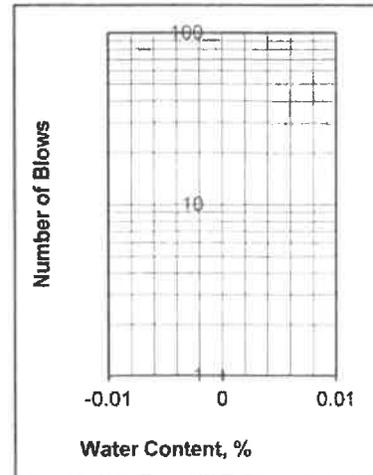
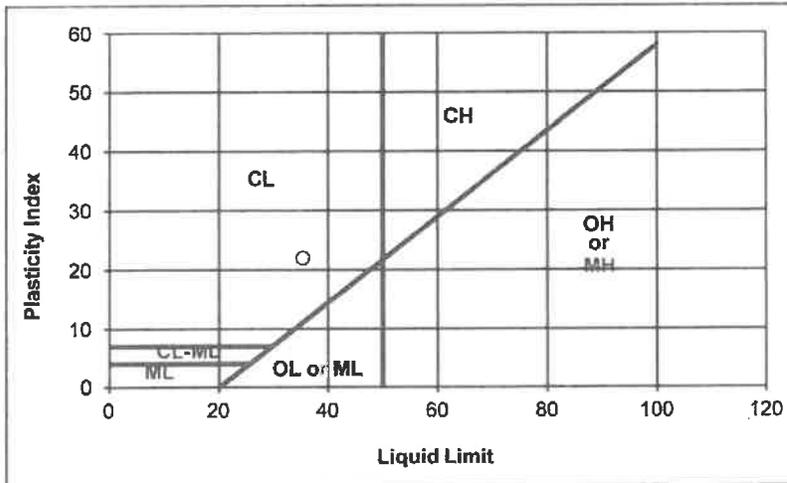
Liquid Limit : 35

Plasticity Index : 22

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

Project: **American Canyon Apartments**

Project Number: **032-20015**

Date Sampled: 4/30/2020

Sampled By: WA

Sample Number:

Sample Location: B1 @ 45-46'

Sample Description: CL

Date Tested: 5/19/2020

Tested By: J Mitchell

Verified By: J Gruszczynski

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	22.53	22.77		27.38	25.07	
Weight of Dry Soil & Tare (g)	21.51	21.61		23.87	22.14	
Weight of Tare (g)	13.56	12.81		13.29	13.88	
Weight of water (g)	1.02	1.17		3.52	2.92	
Weight of Dry Soil (g)	7.95	8.80		10.58	8.27	
Water Content (% of dry wt.)	12.8%	13.2%		33.2%	35.3%	
Number of Blows				23	25	

Plastic Limit : 13

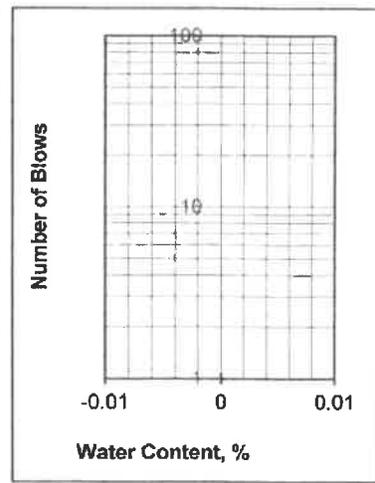
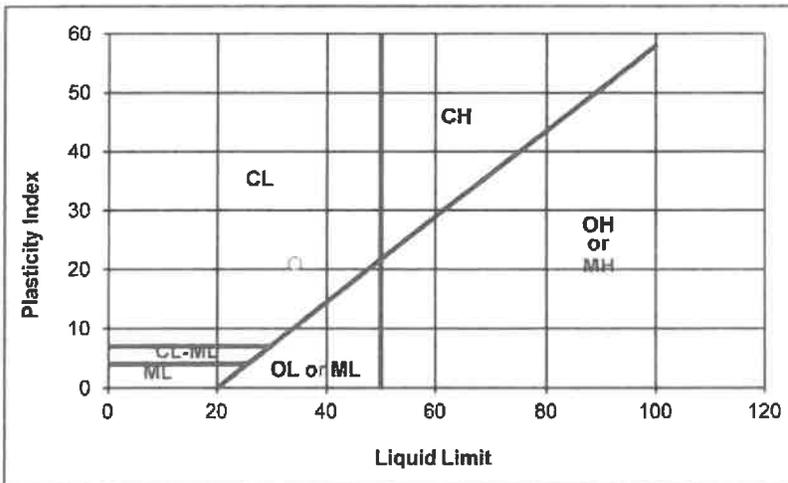
Liquid Limit : 34

Plasticity Index : 21

Unified Soil Classification : CL

Requirement:

Approx. % of Material Retained on # 40 Sieve:



Departures from Outlined Procedure:

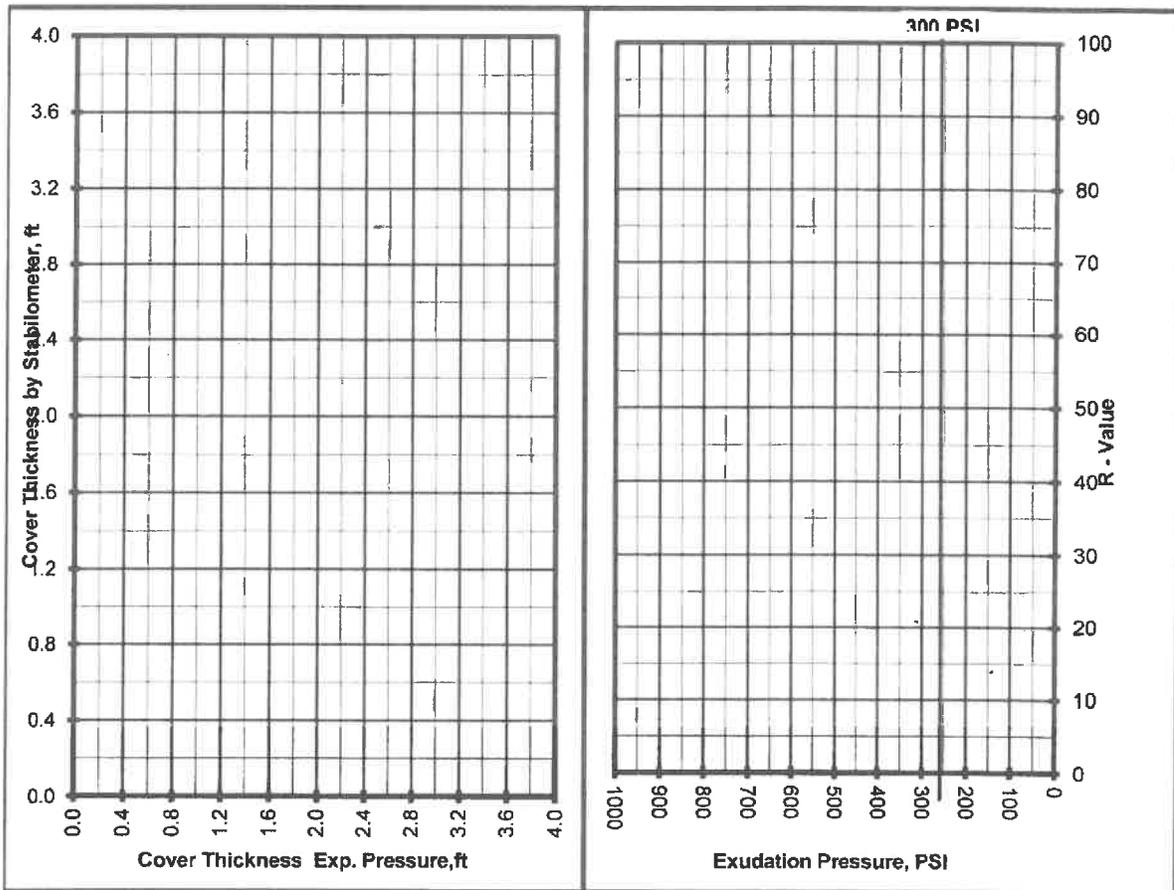
Unusual Conditions, Other Notes:

R - VALUE TEST ASTM D - 2844 / CAL 301

Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/11/2020
 Sample Location/Curve Number : RV#1
 Soil Classification : CL

TEST	A	B	C
Percent Moisture @ Compaction, %			
Dry Density, lbm/cu.ft.	R - Value less than 5 Sample Exuded from bottom of Mold During test		
Exudation Pressure, psi			
Expansion Pressure, (Dial Reading)			
Expansion Pressure, psf			
Resistance Value R			

R - Value at 300 PSI Exudation Pressure	< 5
R - Value by Expansion Pressure	

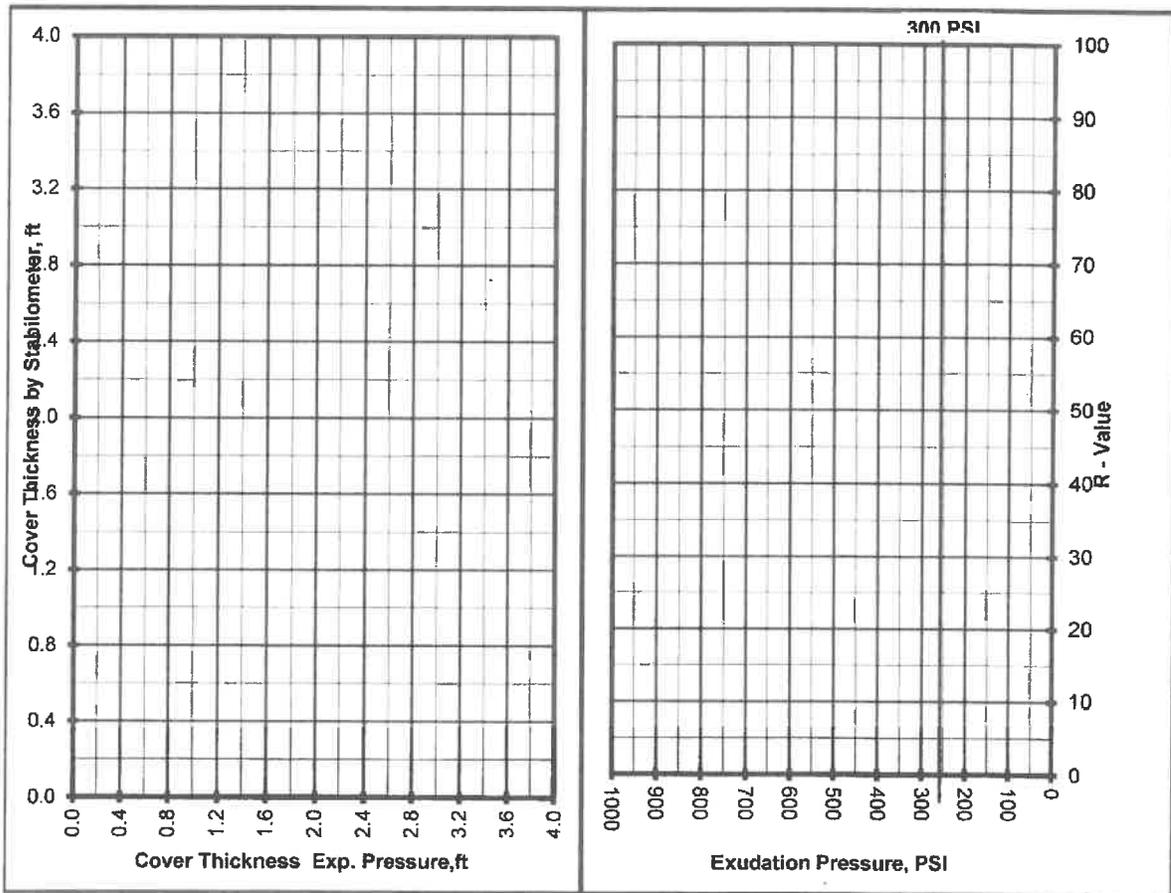


R - VALUE TEST ASTM D - 2844 / CAL 301

Project Number : 032-20015
 Project Name : American Canyon Apartments
 Date : 5/11/2020
 Sample Location/Curve Number : RV#2
 Soil Classification : CL

TEST	A	B	C
Percent Moisture @ Compaction, %			
Dry Density, lbm/cu.ft.	R - Value less than 5 Sample Exuded from bottom of Mold During test		
Exudation Pressure, psi			
Expansion Pressure, (Dial Reading)			
Expansion Pressure, psf			
Resistance Value R			

R - Value at 300 PSI Exudation Pressure	< 5
R - Value by Expansion Pressure	



APPENDIX B
EARTHWORK SPECIFICATIONS

GENERAL

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including but not limited to the furnishing of all labor, tools, and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans, and disposal of excess materials.

PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of Krazan and Associates, Inc., hereinafter known as the Soils Engineer and/or Testing Agency. Attainment of design grades when achieved shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary readjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

TECHNICAL REQUIREMENTS: All compacted materials shall be densified to a density not less than 90 percent relative compaction based on ASTM Test Method D1557 or CAL-216, as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be as determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

SOILS AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the soil report.

The Contractor shall make his own interpretation of the data contained in said report, and the Contractor shall not be relieved of liability under the Contract documents for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or windblown materials attributable to his work.

SITE PREPARATION

Site preparation shall consist of site clearing and grubbing and the preparations of foundation materials for receiving fill.

CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter, and all other matter determined by the Soils Engineer to be deleterious or otherwise unsuitable. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed building areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots larger than 1 inch. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations should not be permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

SUBGRADE PREPARATION: Surfaces to receive Engineered Fill, building or slab loads shall be prepared as outlined above, excavated/scarified to a depth of 12 inches, moisture-conditioned as necessary, and compacted to 90 percent relative compaction.

Loose soil areas, areas of uncertified fill, and/or areas of disturbed soils shall be moisture-conditioned as necessary and recompact to 90 percent relative compaction. All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any of the fill material.

EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. However, compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer.

Both cut and fill areas shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.

SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill are as specified.

APPENDIX C

PAVEMENT SPECIFICATIONS

1. DEFINITIONS - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to is the 2018 Standard Specifications of the State of California, Department of Transportation, and the "Materials Manual" is the Materials Manual of Testing and Control Procedures, State of California, Department of Public Works, Division of Highways. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as defined in the applicable tests outlined in the Materials Manual.

2. SCOPE OF WORK - This portion of the work shall include all labor, materials, tools, and equipment necessary for, and reasonably incidental to the completion of the pavement shown on the plans and as herein specified, except work specifically noted as "Work Not Included."

3. PREPARATION OF THE SUBGRADE - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 90 percent. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

4. UNTREATED AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class 2 material, 1½ inches maximum size. The aggregate base material shall be spread and compacted in accordance with Section 26 of the Standard Specifications. The aggregate base material shall be spread in layers not exceeding 6 inches and each layer of aggregate material course shall be tested and approved by the Soils Engineer prior to the placement of successive layers. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent.

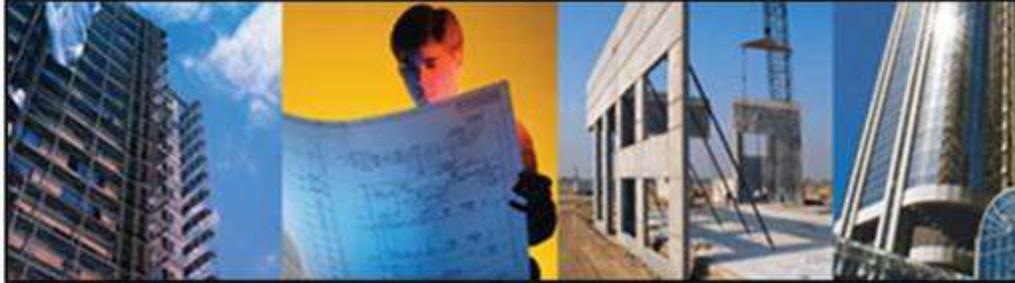
5. AGGREGATE SUBBASE - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class 2 material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent, and it shall be spread and compacted in accordance with Section 25 of the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

6. ASPHALTIC CONCRETE SURFACING - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10. The mineral aggregate shall be Type B, ½ inch maximum size, medium grading and shall conform to the requirements set forth in Section 39. The drying, proportioning and mixing of the materials shall conform to Section 39.

The prime coat, spreading and compacting equipment and spreading and compacting mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50° F. The surfacing shall be rolled with a combination of steel wheel and pneumatic rollers, as described in Section 39-6. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

7. FOG SEAL COAT - The fog seal (mixing type asphaltic emulsion) shall conform to and be applied in accordance with the requirements of Section 37.

Appendix H – Phase I Environmental Site Assessment



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

3805 Broadway

American Canyon, California 95403

Report Date: July 1, 2021

Partner Project No. 21-323875.1



Prepared for:

CRP Affordable Housing & Community Development

122 East 42nd Street, Suite 1903

New York, New York 10168

July 1, 2021

John Heaphey
CRP Affordable Housing & Community
122 East 42nd Street, Suite 1903
New York, New York 10168

Subject: Phase I Environmental Site Assessment
3805 Broadway
American Canyon, California 95403
Partner Project No. 21-323875.1

Dear Mr. Heaphey:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (449) 937-1111.

Sincerely,

DRAFT

J.R. Lephew
Relationship Manager

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by CRP Affordable Housing & Community Development for the property located at 3805 Broadway in American Canyon, Napa County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide CRP Affordable Housing & Community Development with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the western side of Broadway Street and approximately 150 feet from the eastern side of Melvin Road within a mixed commercial and residential area of Napa County. Please refer to the table below for further description of the subject property:

Subject Property Data

Address(es):	3805 Broadway Street, American Canyon, California
Historical Address(es):	3751 Broadway Street, American Canyon, California 3787 Broadway Street, American Canyon, California
Property Use:	Vacant Land
Land Acreage (Ac):	Approximately 3.6 Ac
Number of Buildings:	Zero
Assessor's Parcel Number (APN):	058-362-005 (Parcel A); 058-362-021 (Parcel B); 058-362-016 (Parcel C)
Site Assessment Performed By:	Katie Scherr of Partner
Site Assessment Conducted On:	June 22, 2021

The subject property is currently vacant land. There are no current onsite operations. The subject property consists of three parcels measuring approximately 3.6-acres. Remnants of historical development of the subject property were observed including building foundation, asphalt pavement, demolition debris, two electric service meters, and a small subsurface utility vault. In addition to the current vacant land, the subject property is improved with an asphalt-paved sidewalk on the eastern and western edges of the subject property.

According to available historical records, the subject property was historically undeveloped as early as 1896; developed with agricultural land between 1916 and 1937; developed with a residence around 1952; developed with a three-building residential/commercial property between 1958 and 1963; and as vacant land by c2006. Tenants on the property have included A & A Metals (1965-1970); Raymond Thompson (1965); American Canyon County Water District (1970-1981); Obanion Interprizes (1977-1981); Joe Obanion (1981); and Muidge Shoopman (1981).

The immediately surrounding properties consist of single-family residence and vacant land to the north; Napa County Mosquito Abatement, Melvin Park, and a single-family residence to the south; Fairfield Inn and Suites, American Canyon Mini and RV Storage, and a multi-tenant commercial building to the east across Broadway Street; and single-family residences to the west across Melvin Road.

According to previous subsurface investigation conducted on a nearby property (4391 Highway 29- Case # T0605500097) and topographic map interpretation, the depth of groundwater in the vicinity of the subject property is inferred to be approximately 2 to 8 feet below ground surface (bgs), and groundwater flow is inferred to be toward the west.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- The subject property was listed as a historic underground storage tank (UST) site in the regulatory database report. According to the listing, the subject property reportedly contained one 550-gallon unleaded gasoline UST, which was located at the apparent historical address of 3751 Broadway Street. According to the document provided by the California State Water Resources Control Board (SWRCB), the 550-gallon UST is identified as a tar-wrapped steel tank with underground suction piping and was reportedly installed in 1983. No records related to the installation, removal, or post-removal sampling were provided by the Napa County Environmental Division or any other regulatory department. Therefore, there is no documentation or evidence that the 550-gallon UST has been properly decommissioned and removed from the subject property. Furthermore, if the UST was removed from the subject property, there is no record of proper regulatory UST closure activities, including subsurface sampling to document the condition of the subject property subsurface. Given this information, it is possible that a subsurface leak has occurred and the groundwater and/or soil may be contaminated. Based on the lack of information and documentation regarding the USTs, the potential presence of the unleaded gasoline UST is expected to represent a recognized environmental condition.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 3805 Broadway in American Canyon, Napa County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends the following:

- A limited subsurface investigation should be conducted in order to determine the presence or absence of soil, soil vapor, and/or groundwater contamination due to the historical usage of the subject property.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Purpose	1
1.2	Scope of Work.....	1
1.3	Limitations	2
1.4	User Reliance	2
1.5	Limiting Conditions	3
2.0	SITE DESCRIPTION	4
2.1	Site Location and Legal Description	4
2.2	Current Property Use.....	4
2.3	Current Use of Adjacent Properties.....	4
2.4	Physical Setting Sources.....	5
2.4.1	Topography.....	5
2.4.2	Hydrology.....	5
2.4.3	Geology/Soils	5
2.4.4	Flood Zone Information.....	6
3.0	HISTORICAL INFORMATION.....	7
3.1	Aerial Photograph Review	7
3.2	Fire Insurance Maps	9
3.3	City Directories.....	9
3.4	Historical Topographic Maps.....	10
4.0	REGULATORY RECORDS REVIEW	13
4.1	Regulatory Agencies.....	13
4.1.1	State Department	13
4.1.2	Health Department	13
4.1.3	Fire Department	14
4.1.4	Air Pollution Control Agency.....	14
4.1.5	Regional Water Quality Agency.....	14
4.1.6	Department of Toxic Substances Control	15
4.1.7	Building Department	15
4.1.8	Planning Department.....	15
4.1.9	Oil & Gas Exploration.....	15
4.1.10	Assessor’s Office.....	16
4.2	Mapped Database Records Search.....	16
4.2.1	Regulatory Database Summary.....	16
4.2.2	Subject Property Listings	17
4.2.3	Adjacent Property Listings	17
4.2.4	Sites of Concern Listings.....	18
4.2.5	Orphan Listings.....	18
5.0	USER PROVIDED INFORMATION AND INTERVIEWS.....	19
5.1	Interviews	19
5.1.1	Interview with Owner	19
5.1.2	Interview with Report User.....	20
5.1.3	Interview with Key Site Manager.....	20
5.1.4	Interviews with Past Owners, Operators and Occupants	20

5.1.5	Interview with Others	20
5.2	User Provided Information	20
5.2.1	Title Records, Environmental Liens, and AULs.....	20
5.2.2	Specialized Knowledge.....	20
5.2.3	Actual Knowledge of the User.....	20
5.2.4	Valuation Reduction for Environmental Issues	20
5.2.5	Commonly Known or Reasonably Ascertainable Information	20
5.2.6	Previous Reports and Other Provided Documentation	20
6.0	SITE RECONNAISSANCE	22
6.1	General Site Characteristics.....	22
6.2	Potential Environmental Hazards.....	23
6.3	Non-ASTM Services.....	24
6.3.1	Asbestos-Containing Materials (ACMs)	24
6.3.2	Lead-Based Paint (LBP).....	24
6.3.3	Radon	25
6.3.4	Lead in Drinking Water.....	25
6.3.5	Mold.....	25
6.4	Adjacent Property Reconnaissance.....	25
7.0	FINDINGS AND CONCLUSIONS.....	27
8.0	SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	29
9.0	REFERENCES.....	30

Figures

- Figure 1** Site Location Map
- Figure 2** Site Plan
- Figure 3** Topographic Map

Appendices

- Appendix A** Site Photographs
- Appendix B** Historical/Regulatory Documentation
- Appendix C** Regulatory Database Report
- Appendix D** Qualifications

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 3805 Broadway in American Canyon, Napa County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in

order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

CRP Affordable Housing & Community Development engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of CRP Affordable Housing & Community Development. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees,

vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past or current owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of the AAI User Questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner was not able to document the historical use of the subject property prior to 1896. The following sources were reviewed during the course of this assessment and found to be limited: aerial photographs were not available prior to 1937; city directories were not available prior to 1965; topographic maps prior to 1896 were not reasonably ascertainable from local agencies; and other historical sources such as fire insurance maps did not provide coverage of the subject property. This data failure is not considered critical and does not change the conclusions of this report, as the 1937 aerial photograph revealed the subject property and adjacent properties to be farmland.
- Partner was unable to determine the property use at 5-year intervals, which constitutes a data gap. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews.
- Partner's view of the ground during the site assessment was obstructed due to excessive grass and weeds. Based on the historical use of the subject property, the potential exists that subsurface features such as underground storage tanks (USTs), clarifiers, monitoring wells, and/or evidence of previous subsurface investigations, etc., are present on the subject property. As a result, Partner recommends a re-assessment of these areas once the visual obstruction is no longer present.

Due to time constraints associated with this report, the Client has requested the report despite the above-listed limitations.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 3805 Broadway in American Canyon, California is located on the western side of Broadway Street and approximately 150 feet from the eastern side of Melvin Road. According to the Napa County Assessor, the subject property is legally described as Assessment Parcel Numbers (APNs) 058-362-005, 058-362-021, 058-362-016, and ownership is currently vested in Dambrosio Brothers Investment Company.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently vacant land. There are no current onsite operations. The subject property consists of three parcels measuring approximately 3.6-acres. Remnants of historical development of the subject property were observed including building foundation, asphalt pavement, demolition debris, two electric service meters, and a small subsurface utility vault. In addition to the current vacant land, the subject property is improved with an asphalt-paved sidewalk on the eastern and western edges of the subject property.

The subject property is designated for community commercial (C-C) development by the City of American Canyon.

The subject property was identified as a Historic Underground Storage Tank (HIST UST) site in the regulatory database report, as further discussed in Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed commercial and residential area of Napa County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: A single-family residence (33 Melvin Road) and vacant land

South: Napa County Mosquito Abatement District (15 Melvin Road), Melvin Park (19 Melvin Road), and single-family residence (3665 Broadway)

East: Broadway Street (otherwise known as the Napa Vallejo Highway or Highway 29) beyond which is Fairfield Inn and Suites (3800 Broadway), a multi-tenant commercial building (101 Antonina Avenue), and American Canyon Mini and RV Storage (3700 Broadway)

West: Vacant land beyond which is Melvin Road and single-family residences (18-26 Melvin Road)

The adjacent property to the south is identified as a California Environmental Recording System (CERS), CERS Hazardous Waste (CERS HAZ WASTE), and Resource Conservation and Recovery Act (RCRA) Non-Generator/No Longer Regulated (NonGen/NLR) site in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Cuttings Wharf, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 76 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping moderately toward the west. The subject property is depicted on the 2018 map as developed with no structures depicted.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the west. The nearest surface water in the vicinity of the subject property is the North Slough located approximately 1.27-miles west of the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

According to available information, a public water system operated by the American Canyon Public Works Department serves the subject property vicinity. According to the 2020 Water Quality Report, shallow groundwater beneath the subject property is not utilized for domestic purposes. The source of public water for the City of American Canyon is imported from the State Water Project through the North bay Aqueduct.

According to a previous subsurface investigation conducted on a nearby property (4391 Highway 29-Case # T0605500097), the depth of groundwater in the vicinity of the subject property is inferred to be approximately 2 to 8 feet below ground surface (bgs).

2.4.3 Geology/Soils

The Property is situated within the Coastal Basin physiographic province of the State of California. In the basins just north of the San Francisco Bay (which includes the Property), permeable basalt and tuff compose a portion of the materials overlying the older consolidated rocks. In most basins, however, almost all of the permeable material consists of unconsolidated continental deposits, primarily sand and gravel. The estimated depth to bedrock at the Property is less than 50 feet below the ground surface.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Clear Lake clay and Fagan clay loam. The Clear Lake series consists of very deep, poorly drained, moderately low to moderately highly permeable soils that formed from basin alluvium derived from igneous, metamorphic, and sedimentary rocks. Slopes range from 0 to percent. The Fagan series consists of somewhat deep, well drained, moderately low to moderately highly permeable soils that formed from residuum weathered from sandstone and shale. Slopes range from 15 to 30 percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06055C0617F, dated August 3, 2016, the subject property appears to be located in Zone X, an area located outside of the 100-year and 500-year flood plains.

A copy of the reviewed flood map is not included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information		
Period/Date	Source	Description/Use
1896-1916	Topographic Maps	Undeveloped
1937-1947	Aerial Photographs, Previous Report	Agricultural Land
1952-1958	Aerial Photographs, Previous Report	Residential/Agricultural
1963-1993	Aerial Photographs, Topographic Maps, City Directories, Previous Report, Onsite Observations	Residential/Commercial
2006-Present	Aerial Photographs, City Directories, Previous Report, Onsite Observations, Assessor's Records	Vacant

According to available historical records, the subject property was historically undeveloped as early as 1896; developed with agricultural land between 1916 and 1937; developed with a residence around 1952; developed with a three-building residential/commercial property between 1958 and 1963; and vacant land by 2006. Tenants on the property include A & A Metals (1965-1970); Raymond Thompson (1965); American Canyon County Water District (1970-1981); Obanion Interprizes (1977-1981); Joe Obanion (1981); and Muidge Shoopman (1981).

The subject property was historically used for agricultural purposes. There is a potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used onsite. The entire area of the subject property is either paved over or covered by improvements that make direct contact with any potential remaining concentrations in the soil unlikely. Furthermore, the subject property was since re-developed and used for commercial/light industrial purposes and thus no further action related to the former agricultural use of the subject property is warranted at this time. If redevelopment of the subject property is planned for residential use, the owner/user of the report should contact the local planning department to determine whether sampling relating to the former agricultural use of the subject property is required.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from EDR on June 11, 2021. The following was observed on the subject property and adjacent properties during the aerial photograph review:

Date:	1937, 1947	Scale:	1"=500'
Subject Property:	Appears to be developed as agricultural land		
North:	Appears to be developed as agricultural land		
South:	Appears to be developed as agricultural land/grassland		
East:	Appears to be developed with a residential-like structure and supporting agricultural structures in addition to agricultural land across a roadway		
West:	Appears to be developed as agricultural land/grassland		

Date:	1952, 1958	Scale:	1"=500'
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Date:	1952, 1958	Scale:	1"=500'
Subject Property:	Appears to be developed with a single residential-like structure and supporting driveway in the central portion of the subject property		
North:	Appears to be developed with a residential-like structure and supporting structures		
South:	Appears to be developed with a residential-like structure and supporting agricultural structures in addition to agricultural land/grassland		
East:	No significant changes visible		
West:	No significant changes visible		

Date:	1963, 1968	Scale:	1"=500'
Subject Property:	Appears to be developed with three separate commercial-like structures and a smaller supporting shed-like structure in the central portion of the subject property		
North:	No significant changes visible		
South:	No significant changes visible		
East:	No significant changes visible		
West:	No significant changes visible		

Date:	1974	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	No significant changes visible		
South:	No significant changes visible		
East:	No significant changes visible		
West:	Appears to be developed with two tennis courts and associated driveway		

Date:	1982	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	No significant changes visible		
South:	No significant changes visible		
East:	No significant changes visible		
West:	Appears to be under construction with a structure adjacent to the south of the tennis courts		

Date:	1993	Scale:	1"=500'
Subject Property:	No significant changes visible; however, aerial photograph quality is poor		
North:	No significant changes visible		
South:	No significant changes visible		
East:	Appears to be developed with vacant land and the outline of a road and developed with the present-day mini-storage structure across Broadway (residential structure no longer apparent)		
West:	Appears to be developed with a commercial-like structure, parking lot and recreational area		

Date:	2006, 2009, 2012, 2016	Scale:	1"=500'
Subject Property:	Appears to be vacant land, however foundations and/or pavement from previous structures are still apparent		
North:	No significant changes visible		
South:	No significant changes visible		
East:	Appears to be developed with a large multi-family hotel and associated pool and		

developed with another structure across Antonina Avenue, in addition to the mini-storage facility

West: No significant changes visible

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of Sanborn Fire insurance maps from EDR on June 11, 2021. Sanborn map coverage was not available for the subject property.

Copies of reviewed Sanborn Map No Coverage Letter is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR on June 16, 2021 for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search for 3805 Broadway, 3751 Broadway, and 3787 Broadway (Subject Property)

Year(s)	Occupant Listed
1965	A & A Metal Products awnings (3751 Broadway); Thompson Raymond G (3787 Broadway)
1970	American Canyon County Water District (3751 Broadway); A & A Metal Products (3787 Broadway)
1974	American Canyon County Water District (3751 Broadway)
1977	American Canyon County Water District (3751 Broadway); Obanion Interprizes (3787 Broadway)
1981	American Canyon County Water District (3751 Broadway); Obanion Interprizes, Joe Obanion, Midge Shoopman (3787 Broadway)
1986	XXXX (3751 Broadway); Vacant (3787 Broadway)

Based on the city directory review, no environmentally sensitive listings were identified for the subject property address(es).

City Directory Search for Adjacent Properties

Year(s)	Occupant Listed
1965	Marks Mervyn (18 Melvin Road); Stout Hubert H (22 Melvin Road); Holder Cbie E (33 Melvin Road); Albert A Osterberg (3665 Broadway); Spillman Arth (3700 Broadway);
1970	John Kohr (18 Melvin Road); Robert M. Foulk (22 Melvin Road); Mc Kee Rodney P (26 Melvin Road); Holder Obie B (33 Melvin Road); Arth A Swanson (.332 Broadway);
1974	John Kohr (18 Melvin Road); Dale Bullock (22 Melvin Road); Obie B Holder (33 Melvin Road); Arth A Swanson (3665 Broadway); John Crowell (3700 Broadway);
1977	John Kohr (18 Melvin Road); Obie Holder (33 Melvin Road); John Crowell (3700 Broadway);
1981	John H. Kohr (18 Melvin Road); Dallas Palmer (22 Melvin Road); Obie Holder (33 Melvin Road); James A Philleps (3700 Broadway);
1986	Tom Pollett (18 Melvin Road); Dallas Palmer (22 Melvin Road); XXXX (26 Melvin Road); Obie Holder (33 Melvin Road); Charles Lippincott (3665 Broadway); American Canyon Mini Storage 93700 Broadway);
1992	Obie Holder (33 Melvin Road); American Canyon Mini Storage, U Haul Co Dealers (3700 Broadway)

City Directory Search for Adjacent Properties

Year(s)	Occupant Listed
1995	J Sperry (18 Melvin Road); Obie Holder (33 Melvin Road); L Perez (3665 Broadway); American Canyon Mini Storage, Cindi C. Seaman (3700 Broadway)
2000	P J Beckwith (18 Melvin Road); Enrique Campos (26 Melvin Road); Obie Holder (33 Melvin Road); Leo Perez (3665 Broadway); American Canyon Mini and RV Storage, Al Mason (3700 Broadway); Napa Sonoma Wine Country Visitor Services Center (101 Antonina Avenue)
2005	Patricia J Beckwith (18 Melvin Road); Dana C. Morrill (22 Melvin Road); Enrique M. Campos (26 Melvin Road); Obie B. Holder (33 Melvin Road); Leocadio M. Perez (3665 Broadway); American Canyon Mini and RV Storage (3700 Broadway); Napa County Mosquito Abatement Distributor (3751 Broadway); Napa Visitor’s Center (101 Antonina Drive)
2010	Napa County Mosquito Abatement (15 Melvin Road); Bertha E Gomez (18 Melvin Road); Sondra A. Green (22 Melvin Road); Enrique M. Campos (26 Melvin Road); Obie B. Holder (33 Melvin Road); Rowena Modesto (3665 Broadway); American Canyon Mini and RV Storage (3700 Broadway); Fairfield Inn Napa, YHB Napa LLC (3800 Broadway); Meredith Asperbeltran Inc, Remax Gold, Riverpoint Resort (91 Antonina Avenue); Wine Country Deli (101 Antonina Avenue)
2014	Napa County Mosquito Abatement (15 Melvin Road); Isidro Contreras (18 Melvin Road); Charles Morrill (22 Melvin Road); Leonard J Holder (33 Melvin Road); American Canyon Mini and RV Storage (3700 Broadway); Fairfield Inn and Suites Napa (3800 Broadway); Asperabel Tran Meredith DMD Inc, (91 Antonina Avenue); Roberto’s Bakery Coffee Shop (101 Antonina Avenue)
2017	Stephen M. Pult (18 Melvin Road); Charles Morrill (22 Melvin Road); Leonard J Holder (33 Melvin Road); Leocardio M. Perez (3665 Broadway); American Canyon Mini and RV Storage (3700 Broadway); Fairfield Inn and Suites Napa (3800 Broadway);Beltran Meredith DMD, Holy Family Catholic Church (91 Antonina Avenue); Roberto’s Bakery Coffee Shop (101 Antonia Avenue)

Based on the city directory review, no environmentally sensitive listings were identified for the adjacent property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on June 11, 2021. following was observed on the subject property and adjacent properties during the topographic map review:

Date: 1896, 1898, 1901, 1940, 1942

Subject Property:	Unmapped
North:	Unmapped
South:	Unmapped
East:	Unmapped
West:	Unmapped

Date: 1902

Subject Property:	Depicted as undeveloped
North:	Depicted as undeveloped
South:	Depicted as undeveloped
East:	Depicted as undeveloped across Napa Valley Road
West:	Depicted as undeveloped

Date: 1914, 1916

Subject Property: No significant changes depicted
North: No significant changes depicted
South: No significant changes depicted
East: Appears to be developed with two small structures across Napa Valley Road
West: No significant changes depicted

Date: 1947

Subject Property: No significant changes depicted
North: No significant changes depicted
South: Depicted as developed with a single structure across Napa Valley Road
East: No significant changes depicted
West: No significant changes depicted

Date: 1949, 1951

Subject Property: No significant changes depicted
North: No significant changes depicted
South: No significant changes depicted; however, the single structure is no longer apparent
East: Appears to be developed with various small residential-like structures across Napa Valley Road
West: No significant changes depicted

Date: 1968

Subject Property: Depicted as developed with two structure as well as a road is depicted as traversing through the southern portion of the property
North: Depicted as developed with a single, small structure
South: Appears to be developed with various structures of different sizes
East: No significant changes depicted
West: No significant changes depicted; however, a road is traversing through the center

Date: 1973

Subject Property: No significant changes depicted
North: No significant changes depicted
South: No significant changes depicted
East: No significant changes depicted
West: No significant changes depicted

Date: 1980

Subject Property: No significant changes depicted
North: Appears to be developed with an additional structure
South: No significant changes depicted
East: No significant changes depicted
West: No significant changes depicted

Date: 2012

Subject Property: Depicted as developed with no structures depicted
North: Depicted as developed with no structures depicted
South: Depicted as developed with no structures depicted
East: Depicted as developed with no structures depicted across Broadway
West: Depicted as developed with no structures depicted

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 State Department

Regulatory Agency Data

Name of Agency:	California Environmental Protection Agency (CalEPA)
Point of Contact:	https://siteportal.calepa.ca.gov/nsite/map/results
Agency Address:	1001 I Street, Sacramento, California
Agency Phone Number:	(916) 323-2514
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the CalEPA.

4.1.2 Health Department

Regulatory Agency Data

Name of Agency:	Napa County Environmental Management Division (NCEMD)
Point of Contact:	Columba Ramirez
Agency Address:	1195 3 rd Street, Suite 101, Napa, California
Agency Phone Number:	(707) 253-4471
Date of Contact:	June 9, 2021
Method of Communication:	Online Request
Summary of Communication:	According to records reviewed, a water well was historically located on subject property parcel 058-362-016. The well was 10 feet deep and was to be filled with concrete to the top for proper abandonment. The well was properly abandoned in May/June of 2004.

No additional records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the NCEMD.

Copies of pertinent documents are included in Appendix B of this report.

4.1.3 Fire Department

Regulatory Agency Data

Name of Agency:	American Canyon Fire Protection District (ACFPD)
Point of Contact:	Martha Banuelos
Agency Address:	911 Donaldson Way East, American Canyon, California
Agency Phone Number:	(707) 551-0653
Date of Contact:	June 9, 2021
Method of Communication:	Email
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the ACFPD.

4.1.4 Air Pollution Control Agency

Regulatory Agency Data

Name of Agency:	Bay Area Air Quality Management District (BAAQMD)
Point of Contact:	Rochele Henderson
Agency Address:	375 Beale Street #600, San Francisco, California
Agency Phone Number:	(415) 516-1916
Date of Contact:	June 9, 2021
Method of Communication:	Online Request/Email
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the BAAQMD.

Copies of pertinent documents are included in Appendix B of this report.

4.1.5 Regional Water Quality Agency

Regulatory Agency Data

Name of Agency:	Regional Water Quality Control Board (RWQCB)
Point of Contact:	https://geotracker.waterboards.ca.gov/
Agency Address:	1515 Clay Street, Suite 1400, Oakland, California 94612
Agency Phone Number:	(510) 622-2300
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

According to the Geotracker database, a release that occurred at 4391 Highway 29 appears on the subject property boundary. According to online research, the property address is actually 1.2-miles north of the subject property.

4.1.6 Department of Toxic Substances Control

Regulatory Agency Data

Name of Agency:	California Department of Toxic Substances Control (DTSC)
Point of Contact:	https://www.envirostor.dtsc.ca.gov/public/ ; https://hwts.dtsc.ca.gov/
Agency Address:	1001 I Street, Sacramento, California 95814
Agency Phone Number:	(916) 255-3687
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the DTSC.

4.1.7 Building Department

Regulatory Agency Data

Name of Agency:	American Canyon Community Development Department (ACCDD)
Point of Contact:	Cherri Walton
Agency Address:	4831 Broadway Street, Suite 201, American Canyon, California
Agency Phone Number:	(707) 647-5320
Date of Contact:	June 9, 2021
Method of Communication:	Email
Summary of Communication:	According to Ms. Walton, the City of American Canyon does not have any building permits or records for the provided addresses.

4.1.8 Planning Department

Regulatory Agency Data

Name of Agency:	American Canyon Planning Department (ACPD)
Point of Contact:	Nicolle Jones
Agency Address:	4381 Broadway, Suite 201, American Canyon, California 94503
Agency Phone Number:	(707) 647-4581
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is zoned C-C for Community Commercial development by the City of American Canyon

4.1.9 Oil & Gas Exploration

Regulatory Agency Data

Name of Agency:	California Geologic Energy Management Division (CalGEM)
Point of Contact:	https://maps.conservation.ca.gov/doggr/wellfinder/#/-122.25274/38.17489/17
Agency Address:	801 K Street, MS 20-22, Sacramento, California 95814
Agency Phone Number:	(916) 322-1110
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	According to CalGEM, no oil or gas wells are located on or adjacent to the subject property.

4.1.10 Assessor's Office

Regulatory Agency Data	
Name of Agency:	Napa County Assessor (NCA)
Point of Contact:	John Tuteur
Agency Address:	1127 1 st Street, Napa, California 94559
Agency Phone Number:	(707) 253-4466
Date of Contact:	June 28, 2021
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is identified by Assessor Parcel Numbers (APNs) 058-362-005, 058-362-021, and 058-362-016 and is currently owned by Dambrosio Brothers Investment Co. There are no current buildings on the 3.48-acre lot.

Copies of pertinent documents are included in Appendix B of this report.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data				
Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	Y	N	N

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N
Other Listings	Varies	N	Y	N

4.2.2 Subject Property Listings

The subject property is identified as a Historic Underground Storage Tank (HIST UST) site in the regulatory database report, as discussed below:

- The subject property, identified as Maintenance Building Gasoline at 3751 Broadway Street, is identified as containing one 550-gallon UST. The UST was reportedly installed in 1983 and is used for unleaded motor vehicle fuel. No documentation of the removal of the UST was found or if post-removal soil sampling was conducted. In addition, no further information is given for this listing. Based on the lack of information regarding the UST removal, it is possible that a release of motor vehicle fuel from the UST has resulted in an impact to the subsurface of the subject property. Based on this information, this listing is expected to represent a recognized environmental concern.

4.2.3 Adjacent Property Listings

The adjacent property to the south is identified as a California Environmental Recording System (CERS), CERS HAZ WASTE, and Resource Conservation and Recovery Act (RCRA) Non-Generator/No Longer Regulated (NonGen/NLR) site in the regulatory database report, as discussed below:

- The property, identified as Napa County Mosquito Abatement District at 15 Melvin Road, is located south (hydrologically cross-gradient) of the subject property. According to the EDR listing, the property has a CERS HAZ WASTE description as a Hazardous Waste Generator and a CERS description as a Chemical Storage Facility. No violations are associated with the CERS listing. In addition, on October 3, 2013, the property was identified as an RCRA NonGen/NLR facility. There is an NAICS description of 'Regulation and Administration of Communications, Electric, Gas, and Other Utilities' associated with the listing with no violations found. Based on the current regulatory status, absence of reported releases or violations, nature of the listings, cross-gradient location, and regulatory oversight, these listings are not expected to represent a significant environmental concern.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.5 Orphan Listings

No orphan listings are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from CRP Affordable Housing & Community Development (User of this report).

User Responsibilities

Item	Provided By User	Not Provided By User	Discussed Below	Does Not Apply
AAI User Questionnaire			X	
Title Records, Environmental Liens, and AULs			X	
Specialized Knowledge			X	
Actual Knowledge			X	
Valuation Reduction for Environmental Issues			X	
Identification of Key Site Manager	Section 5.1.3			
Reason for Performing Phase I ESA	Section 1.1			
Prior Environmental Reports			X	
Other		X		

5.1 Interviews

5.1.1 Interview with Owner

The owner of the subject property identified as Dambrosio Brothers Investment Company, was not available to be interviewed at the time of the assessment.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User. The information requested was not received prior to the issuance of this report. Because the Report User (Client) is a lender, it is understood that the Report User would not have knowledge of the property that would significantly impact our ability to satisfy the objectives of this assessment. The lack of this information is not considered to represent a significant data gap.

5.1.3 Interview with Key Site Manager

A key site manager was not provided to be interviewed at the time of this assessment.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was not provided with title records or environmental lien and AUL information for review as part of this assessment.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

The following information was provided to Partner for review during the course of this assessment:

Phase 1 Environmental Site Assessment, Krazan & Associates (April 16, 2020)

Krazan & Associates (Krazan) prepared this report on behalf of Mr. Pete Harispuru and Highridge Costa Development Company. The assessment was performed in accordance with ASTM Standard E1527-13. The assessment consisted of a site reconnaissance, interviews with knowledgeable personnel, review of historical information, and a review of federal, state and local regulatory databases. Pertinent information contained in this report is summarized below:

- At the time of the 2020 assessment, the subject property was vacant land, which was associated with the apparent historical subject site addresses of 3751 and 3787 Broadway Street. The property had appeared to have been developed with one or more structures from 1952 to 2004.
- According to the Krazan report, there was no obvious evidence of surface waste disposal; however, long grasses and weeds were noted to have limited Krazan's view of the ground. No odors, surface staining, stressed vegetation, or other obvious indication of the presence of hazardous materials were noted in associated with the subject property.
- During Krazan's visual observations of the subject property, no hazardous materials or hazardous waste were observed. Exposed surface soils did not exhibit obvious signs of discoloration. No obvious evidence of USTs was noted. No standing water or major depressions were observed on the subject property.
- Krazan's review of historical aerial photographs indicated that a structure was located within the central-western portion of the subject property circa 1952. Krazan believed that a septic system was possibly associated with the former onsite structure.
- Krazan reviewed the EDR Radius Report for the subject property in 2020. According to the EDR database, the subject property, at the apparent historical address of 3751 Broadway Street, reportedly installed an underground storage tank (UST) in 1983. No documentation regarding location, installation, structural integrity while operational, or conditions at the time of removal, if removed, were identified during the course of the assessment. Based off this information, Krazan identified the presence of the UST as a REC.

Krazan identified one REC in association with the UST on the subject property. Due to the lack of information regarding the UST and unknown condition of the subsurface of the subject site, Krazan recommended a Phase II limited subsurface survey and assessment in the inferred vicinity of the former onsite structures to assess the presence or absence of subsurface metallic anomalies characteristic of USTs and related equipment and the potential concomitant subsurface impacts.

Copies of pertinent pages reviewed are included in Appendix B of this report.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was overcast. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data

Site Assessment Performed By:	Katie Scherr
Site Assessment Conducted On:	June 22, 2021

* Partner was not accompanied by onsite personnel during the field reconnaissance.

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 *Solid Waste Disposal*

The subject property is currently a vacant lot with no onsite structures. As such, solid wastes are not presently generated at the subject property. Evidence of de minimis wind-blown and discarded trash was observed at the northern, eastern, and southern edges of the subject property. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 *Sewage Discharge and Disposal*

Sanitary discharges are not currently generated on the subject property. The City of American Canyon services the subject property vicinity. No wastewater treatment facilities or septic systems were observed or reported on the subject property.

6.1.3 *Surface Water Drainage*

Storm water directly infiltrates onsite soils.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Fish & Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 *Source of Heating and Cooling*

The subject property is currently a vacant lot with no onsite structures. As such, no building utility systems currently exist on the subject property.

Partner noted the presence of two, inactive electric service meters on the southwestern portion of the subject property. Electricity and natural gas were historically provided by Pacific Gas and Electric (PG&E).

6.1.5 *Wells and Cisterns*

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater is not currently generated at the subject property. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

Older transformers and other electrical equipment could contain PCBs at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Under the regulations, there are three categories into which electrical equipment can be classified: 1) Less than 50 parts per million (ppm) of PCBs – “Non-PCB;” 2) 50 ppm-500 ppm – “PCB-Contaminated;” and, 3) Greater than 500 ppm – “PCB-Containing.” The manufacture, process, or distribution in commerce or use of any PCB in any manner other than in a totally enclosed manner was prohibited after July 2, 1979.

The on-site reconnaissance addressed transformers that may contain PCBs. Two pole-mounted transformers were observed on the subject property. The transformers are not labeled indicating PCB content. No staining or leakage was observed in the vicinity of the transformers. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

Additionally, no other potential PCB-containing equipment (interior transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, balers, etc.) was observed on the subject property during Partner’s reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

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. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building that have not been appropriately tested are "presumed asbestos-containing material" (PACM).

The subject property is currently vacant with no onsite structures. As such, an asbestos evaluation was not required by the Client's scope of services

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm² (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

As the subject property is currently a vacant with no onsite structures, it is unlikely that LBP is present on the subject property.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 3. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

According to available information, a public water system operated by the American Canyon Public Works Department serves the subject property vicinity. According to the 2020 Water Quality Report, shallow groundwater beneath the subject property is not utilized for domestic purposes. The source of public water for the City of American Canyon is imported from the State Water Project through the North bay Aqueduct. According to the 2020 Annual Water Quality Report, water supplied to the subject property is in compliance with all State and Federal regulations pertaining to drinking water standards, including lead and copper. Water sampling was not conducted to verify water quality.

6.3.5 Mold

The subject property is currently a vacant lot without structures. As such, additional action with respect to mold is not warranted.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises.

6.4.1 PCBs

Two pole-mounted transformers were observed on the adjacent properties. No staining or leakage was observed in the vicinity of the transformers. Based on these observations, the presence of adjacent transformers is not expected to represent a significant environmental concern.

No additional items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs,

strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards

7.0 FINDINGS AND CONCLUSIONS

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- The subject property was listed as a historic underground storage tank (UST) site in the regulatory database report. According to the listing, the subject property reportedly contained one 550-gallon unleaded gasoline UST, which was located at the apparent historical address of 3751 Broadway Street. According to the document provided by the California State Water Resources Control Board (SWRCB), the 550-gallon UST is identified as a tar-wrapped steel tank with underground suction piping and was reportedly installed in 1983. No records related to the installation, removal, or post-removal sampling were provided by the Napa County Environmental Division or any other regulatory department. Therefore, there is no documentation or evidence that the 550-gallon UST has been properly decommissioned and removed from the subject property. Furthermore, if the UST was removed from the subject property, there is no record of proper regulatory UST closure activities, including subsurface sampling to document the condition of the subject property subsurface. Given this information, it is possible that a subsurface leak has occurred and the groundwater and/or soil may be contaminated. Based on the lack of information and documentation regarding the USTs, the potential presence of the unleaded gasoline UST is expected to represent a recognized environmental condition.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 3805 Broadway in American Canyon, Napa County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends the following:

- A limited subsurface investigation should be conducted in order to determine the presence or absence of soil, soil vapor, and/or groundwater contamination due to the historical usage of the subject property.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 3805 Broadway in American Canyon, Napa County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:

DRAFT

Katie Scherr
Environmental Scientist

Reviewed By:

DRAFT

Jamie Jastrab
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, June 2021

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, June 2021

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, June 2021

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, June 2021

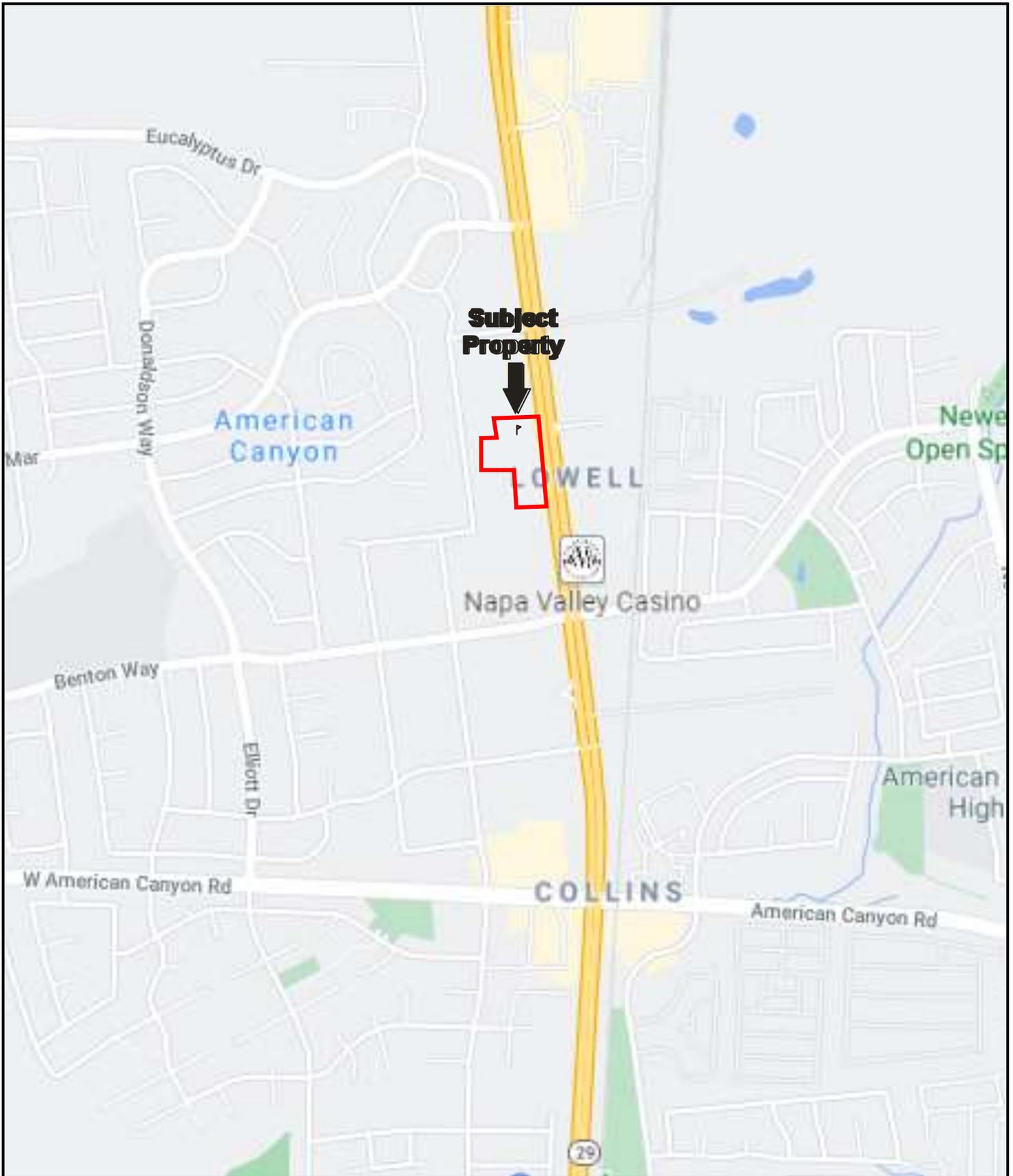
United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, June 2021

United States Geological Survey, accessed via the Internet, June 2021

United States Geological Survey Topographic Map 1995, 7.5 minute series, accessed via internet, June 2021

FIGURES

- 1 SITE LOCATION MAP**
- 2 SITE PLAN**
- 3 TOPOGRAPHIC MAP**



Drawing Not To Scale

KEY:
Subject Property 

FIGURE 1: SITE LOCATION MAP
Project No. 21-323875.1

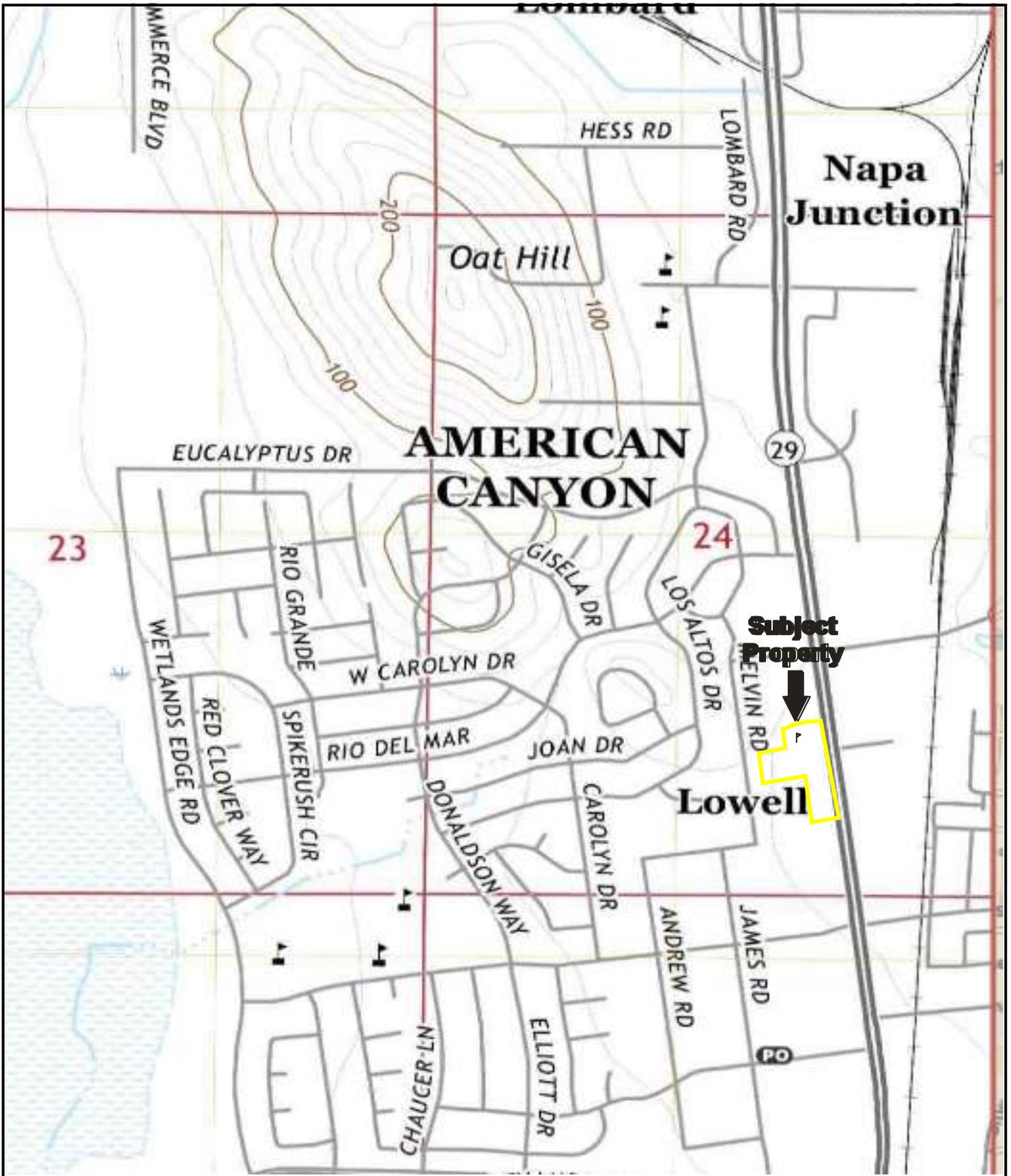


GROUNDWATER FLOW

Pole-mounted transformer

KEY:
 Subject Property
 Approximate location of historical development

FIGURE 2: SITE PLAN
 Project No. 21-323875.1



USGS 7.5 Minute *Cuttings Worth, California* Quadrangle
 Created: 2018

KEY:
 Subject Property 

FIGURE 3: TOPOGRAPHIC MAP
 Project No. 21-323875.1

APPENDIX A: SITE PHOTOGRAPHS



1. View of the subject property from the northeast corner



2. View of the eastern subject property boundary line



3. View of the subject property from the eastern boundary line



4. View of the subject property from the western boundary line



5. View of the subject property from the northern boundary line



6. View of the subject property from parcel 058-362-005



7. View of some building remnants located on parcel 058-362-016



8. View of additional building remnants located on parcel 058-362-021



9. View of building remnants on the west-northwestern corner of parcel 058-362-021



10. View of some asphalt pavement remnants adjacent to the building remnants



11. View of some tree debris located in the southern portion of parcel 058-362-021



12. View of some vegetation located on parcel 058-362-005



13. View of some old water and sewage



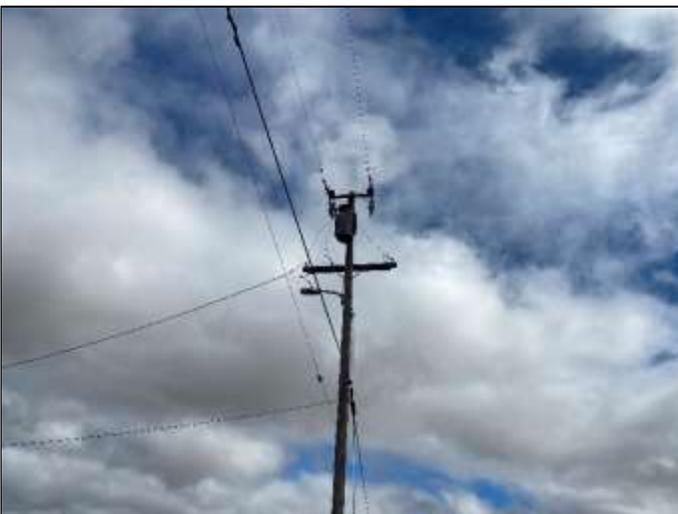
14. View of what appears to be a municipal sewer line vent located in the southeastern corner



15. View of what appears to be a subsurface utility vault on parcel 058-362-016



16. View of the old electric service meters located in the central portion of the subject property



17. View of one of the pole-mounted transformers on the subject property



18. View of the northern adjacent vacant land



19. View of the northern adjacent single-family residence



20. View of the southern adjacent single-family residence



21. View of the southern adjacent Mosquito Abatement Center



22. View of the eastern adjacent multi-tenant commercial building and hotel across Broadway

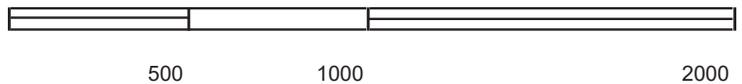
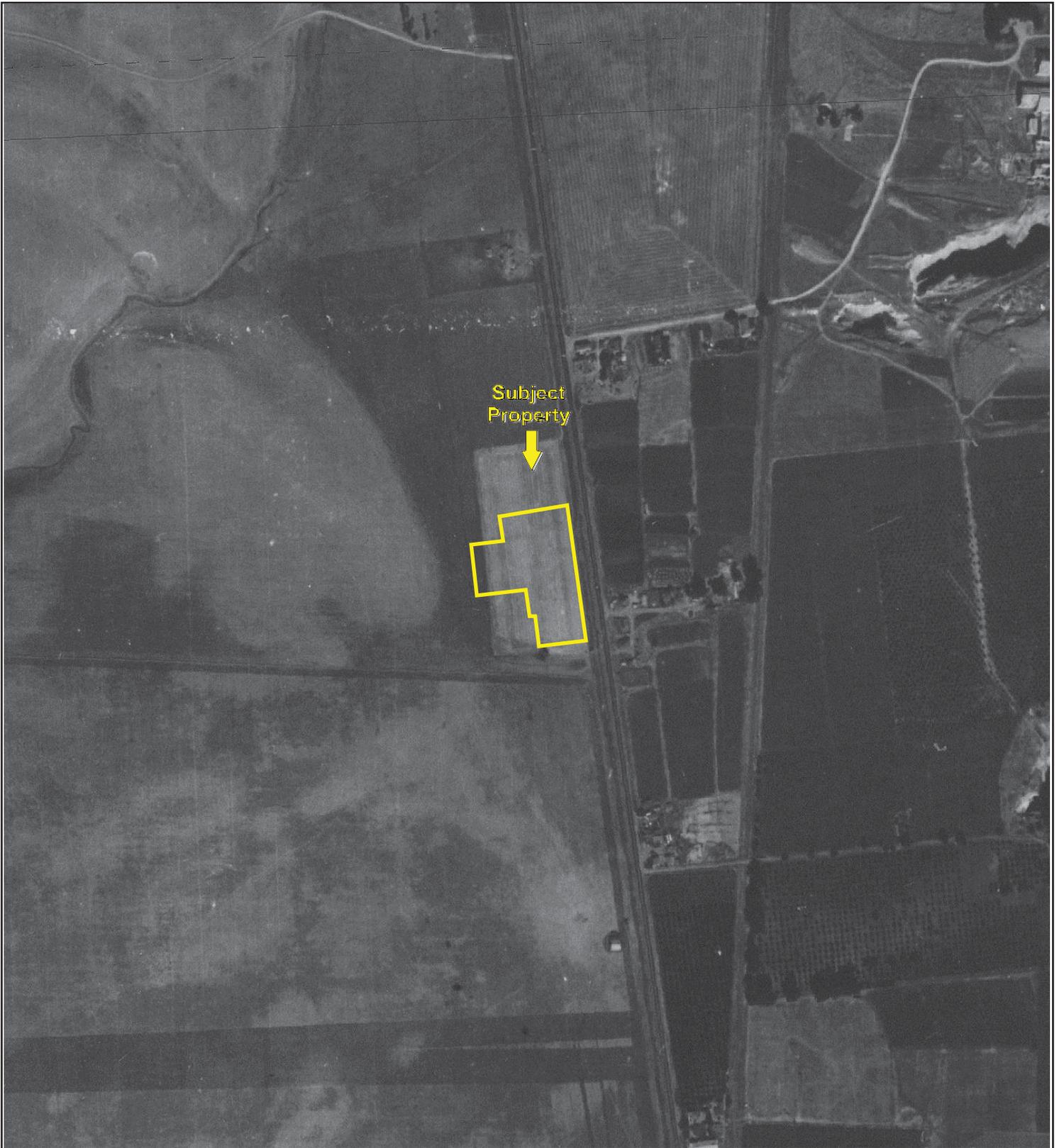


23. View of the eastern adjacent Mini and RV Storage across Broadway



24. View of the western adjacent vacant land beyond which is Melvin Road and single-family residences

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



Key: Subject Property 



Key: Subject Property 

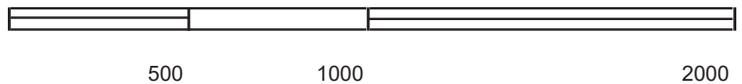


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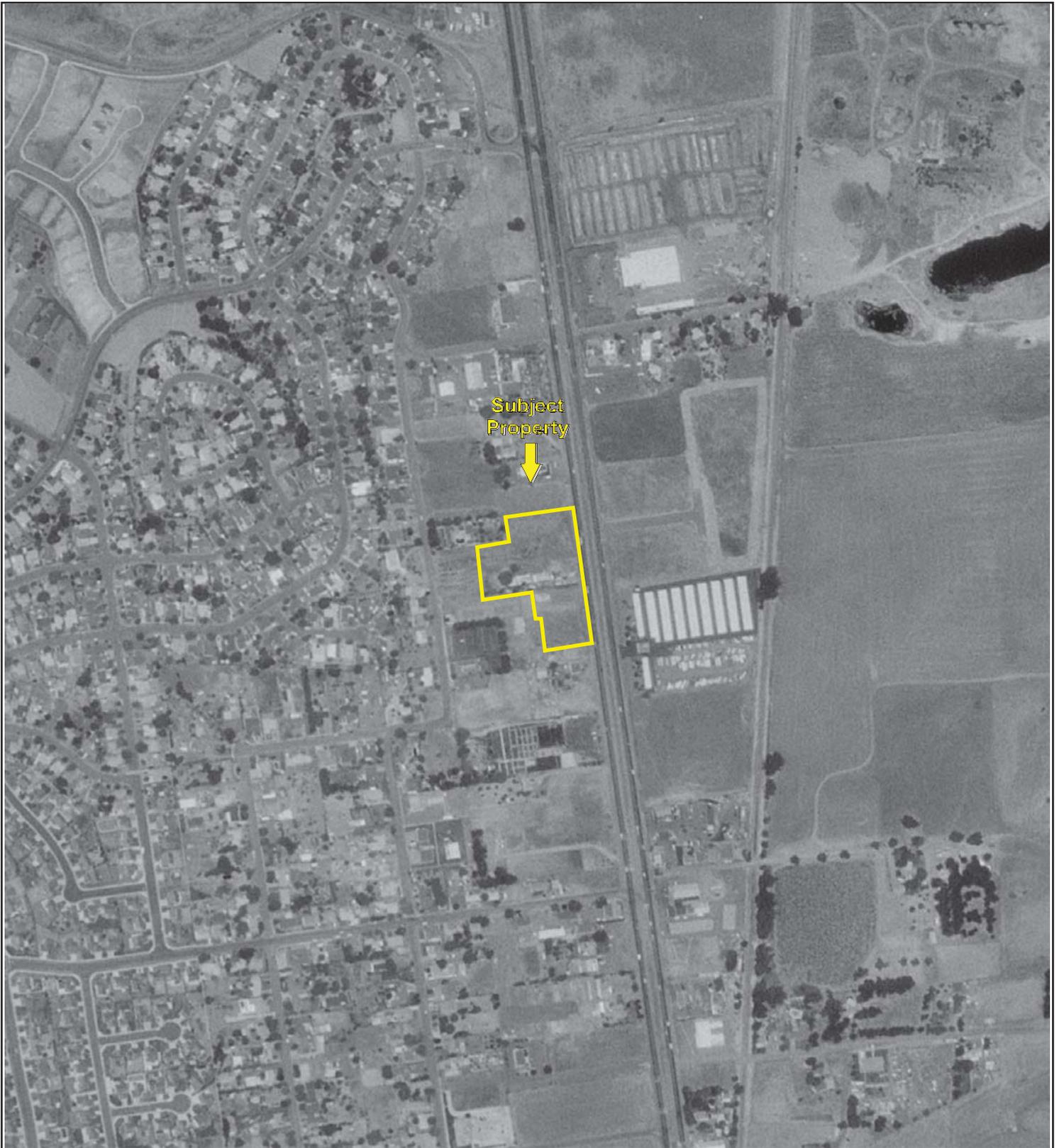


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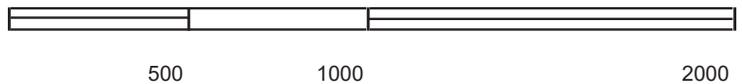
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Key: Subject Property 



Key: Subject Property 



Key: Subject Property 

Certified Sanborn® Map Report

06/11/21

Site Name:

3805 Broadway
3805 Broadway
American Canyon, CA 94503
EDR Inquiry # 6533398.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Irin Chacon



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PO # 21-323875.1
Project 21-323875.1



Sanborn® Library search results

Certification #: 34BB-476C-A701

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The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

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3805 Broadway

3805 Broadway
American Canyon, CA 94503

Inquiry Number: 6533398.5
June 16, 2021

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1986	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1981	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1977	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1974	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1970	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1965	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1959	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1937	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1926	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory

EXECUTIVE SUMMARY

Year Target Street Cross Street Source

FINDINGS

TARGET PROPERTY STREET

3805 Broadway
American Canyon, CA 94503

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
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ANTONINA AVE

2017	pg A1	EDR Digital Archive	
2014	pg A5	EDR Digital Archive	
2010	pg A9	EDR Digital Archive	
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1977	-	Haines Criss-Cross Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1970	-	Polk's City Directory	Street not listed in Source
1965	-	Polk's City Directory	Street not listed in Source
1959	-	Polk's City Directory	Street not listed in Source
1937	-	Polk's City Directory	Street not listed in Source
1926	-	Polk's City Directory	Street not listed in Source

ANTONINA DR

2005	pg A13	EDR Digital Archive
2000	pg A17	EDR Digital Archive

BROADWAY ST

2017	pg A2	EDR Digital Archive
2014	pg A6	EDR Digital Archive
2010	pg A10	EDR Digital Archive
2005	pg A14	EDR Digital Archive
2000	pg A18	EDR Digital Archive
1995	pg A20	EDR Digital Archive
1992	pg A22	EDR Digital Archive
1986	pg A24	Haines Criss-Cross Directory

FINDINGS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
1981	pg A26	Haines Criss-Cross Directory	
1977	pg A28	Haines Criss-Cross Directory	
1974	pg A30	Polk's City Directory	
1970	pg A32	Polk's City Directory	
1970	pg A33	Polk's City Directory	
1965	pg A35	Polk's City Directory	
1965	pg A36	Polk's City Directory	
1959	-	Polk's City Directory	Target and Adjoining not listed in Source
1937	-	Polk's City Directory	Street not listed in Source
1926	-	Polk's City Directory	Street not listed in Source

MELVIN RD

2017	pg A4	EDR Digital Archive	
2014	pg A8	EDR Digital Archive	
2010	pg A12	EDR Digital Archive	
2005	pg A16	EDR Digital Archive	
2000	pg A19	EDR Digital Archive	
1995	pg A21	EDR Digital Archive	
1992	pg A23	EDR Digital Archive	
1986	pg A25	Haines Criss-Cross Directory	
1981	pg A27	Haines Criss-Cross Directory	
1977	pg A29	Haines Criss-Cross Directory	
1974	pg A31	Polk's City Directory	
1970	pg A34	Polk's City Directory	
1965	pg A37	Polk's City Directory	
1959	-	Polk's City Directory	Street not listed in Source
1937	-	Polk's City Directory	Street not listed in Source
1926	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

ANTONINA AVE 2017

91	BELTRAN MEREDITH DMD INC
	HOLY FAMILY CATHOLIC CHURCH
101	ROBERTOS BAKERY COFFEE SHOP

BROADWAY ST 2017

3417 A BRIGHT FUTURE
EYE CARE CENTER OF NAPA VALLEY
SUBWAY
UMPQUA BANK
VINTAGE BANK THE

3419 AMERICAN CANYON ORTHODONTICS
CANYON KAJUKENBO MARTIAL ARTS INSTIT
CRAVE RESTAURANT & CATERING
GOLDEN STATE LUMBER
NSS CAPITAL LLC
RUBADUB DOG BATH
YUMMY GARDEN

3421 29 OUTDOOR GEAR
WESTAMERICA BANK

3423 AMERICAN CANYON FAMILY RCN
HESS RH DEVELOPMENT
HUMPHREY, C
SERENITY DAY SPA & SALON

3425 THAI KITCHEN AMERICAN CANYON

3427 AMERICAN CANYON CHAMBER OF COMMERCE
BOLT STAFFING
DAVID R YORK CPA
LOS CANTAROS TAQUERIA
YORK, DAVID

3429 DAVID R YORK CPA
HOME INSTEAD SENIOR CARE
K J NAILS
RE MAX
STATE FARM INSURANCE
TIFFYS

3431 AMERICAN CANYON DENTAL CARE DR JU
AMERICAN CANYON FAMILY RESOURCE CENT
BAY AREA OSTEOPATHIC DOCTOR
CURVES
JULIA VILLA DDS
NEWMD URGENT CARE INC
SEAMS WHEN PIGS FLY
SECURITY ENFORCEMENT ALLIANCE
SUSAN C CISLO DO

3433 CANYON MED SPA
FARMERS INSURANCE
FARMERS INSURANCEDAVID COULOMBE
HANGER CLINIC PROSTHETICS & ORTHOTI
HOME INSTEAD SENIOR CARE
STUDIO 29 HAIR DESIGN

3436 GENERAL PLUMBING SUPPLY CO

3439 YOUR STYLE DECOR

3441 COST RITE FURNITURE

3448 AMERICAN CANYON CAR WASH

3456 NAVAJO RUG & UPHOLSTERY CLEANING CO

BROADWAY ST 2017 (Cont'd)

3456 NAVAJO RUG CO
3462 AMPM
EMERGENCY LOCKSMITH
3464 RANERI & LONG ROOFING CO
3470 MARTINEZ, ELISABETH
3475 ACCESS ELECTRONIC SERVICES
3477 ACACIA CREMATION & BURIAL SOCIETY
ACACIA SOCIETY
HAIR WORKS SALON
3479 PRETECT TOUCH BY ROXZEN
3600 DOUBLETREE
HILTON
3631 BROADWAY LANDSCAPE MATERIALS
3635 MID CITY NURSERY
3665 PEREZ, LEOCADIO M
3700 AMERICAN CANYON MINI & RV STORAGE
3800 FAIRFIELD INN & SUITES NAPA AMERICAN
3845 CANYON CAFE
3853 MUFTAH, GHUZI
NOOR, HAMID
3860 ABBA IN ONE CARE SERVICES
CALIFORNIA DENTAL CARE
CROWN REALTY PMPJ
CROWN REALTY PROPERTY MANAGEMENT
FARMERS INSURANCE
R & D TRANSPORTATION SERVICES INC
VARGAS ENTERPRISE
WORLD FINANCE
3863 KERNS, CHERYL L
3885 FABBRI STATUARY
3915 AC FOOD & LIQUOR
BROADWAY MARKET
3919 ALL STAR HAIR SALON
FAMILY HAIR SALON
THAI MARKET
3921 LE PARIS ARTISAN & GOURMET CAFE
3927 SKY NAIL SALON
3945 TACOS MICHOCAN

MELVIN RD 2017

- 9 GUADARRAMA, TAM S
- 11 LAKE CHABOT CONGREGATION
- 16 MOROFSKY, MIKE W
- 18 PULT, STEPHEN M
- 22 MORRILL, CHARLES
- 33 HOLDER, LEONARD J
- 34 AGUIRRE, ANTONIO M
- 38 BOWERS, KEITH R
- 42 ESCOBAR, CRISTIAN
- 44 BYRON, MICHAEL S
- 48 MANSOUR, BASEM A
- 54 PAYNE, EDWARD A
- 56 BURKHOLDER, ROD L
- 60 KEISER, JEFFREY P
- 62 MARCUS, RAY T
- 64 DONALDSON, ALBERT B
- 66 ANDERSON, BENJAMIN C



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ANTONINA AVE 2014

91 ASPRERBELTRAN MEREDITH DMD INC
101 ROBERTOS BAKERY COFFEE SHOP

BROADWAY ST 2014

3417 ALANTIC PACIFIC REALTY
 ASHMUN & ASSOCIATES ATLANTIC PACIF
 BELLA ULTIMATE TANNING SALON
 CANYON PLAZA
 EYE CARE CENTER OF NAPA VALLEY
 SUBWAY SANDWICHES
 UMPQUA BANK
 VINTAGE BANK THE
 3419 ACTIVE REHAB PHYSICAL THERAPY
 ACTIVE REHAP PHYS THERAPY
 AMERICAN CANYON ORTHODONTICS
 CANYON KAJUKENBO MARTIAL ARTS INSTIT
 CRAVE RESTAURANT & CATERING
 GOLDEN STATE LUMBER
 YUMMY GARDEN
 3421 COUNTY OF NAPA
 WESTAMERICA BANK
 3423 HESS RH DEVELOPMENT
 HUMPHREY, C
 SERENITY SALON & DAY SPA
 3425 THAI KITCHEN AMERICAN CANYON
 3427 AMERICAN CANYON CHAMBER OF COMMERCE
 BOLT STAFFING INC
 TAQUERIA ROSITA 2
 YORK DAVID R CPA
 YORK, DAVID
 3429 FRINK-HUNTER, CHERIE
 HAMMER MIKE INS AGT
 K J NAILS
 MIKE HAMMER STATE FARM INSURANCE A
 REMAX GOLD REALTY
 STATE FARM INSURANCE
 3431 AMERICAN CANYON DENTAL CARE
 AMERICAN CANYON FAMILY RCN
 BAY AREA OSTEOPATHIC DOCTOR
 E&A1 TOWING
 ETHEVARRIA, JOHN M
 EXCEL CARE IMMEDIATE CARE CENTER
 NEWMD URGENT CARE INC
 SEAMS WHEN PIGS FLY
 VILLA JULIA DDS
 3433 1ST AMERICAN TITLE COMPANY OF NAPA
 FARMERS INSURANCE GROUP
 FARMERS INSURANCEDAVID COULOMBE
 HANGER PROSTHETICS & ORTHOTICS
 HOME INSTEAD SENIOR CARE
 STUDIO 29 HAIR DESIGNS
 3434 OCCUPANT UNKNOWN,
 3436 GENERAL PLUMBING SUPPLY CO
 3439 YOUR STYLE DECOR

BROADWAY ST 2014 (Cont'd)

3441	CANYON GALLERY & ART CENTER
3448	AMERICAN CANYON CAR WASH OCCUPANT UNKNOWN,
3450	OCCUPANT UNKNOWN,
3456	NAPA VALLEY RUG NAVAJO RUG CO NAVAJO RUG COMPANY
3462	EMERGENCY LOCKSMITH MIKES ARCO MINI MART & GAS
3466	NAPA VALLEY CASINO
3470	MARTINEZ, ELISABETH PENA, ANTONIO
3475	ACCESS ELECTRONIC SERVICES
3477	HAIRWORKS SALON
3600	GAIA NAPA VALLEY HOTEL & SPA
3631	BROADWAY LANDSCAPE MATERIALS
3635	MID CITY NURSERY
3657	ADAMS TIRES SERVICES
3663	OCCUPANT UNKNOWN,
3665	OCCUPANT UNKNOWN,
3700	AMERICAN CANYON MINI & RV STORAGE
3800	FAIRFIELD INN & SUITES FAIRFIELD INN & SUITES NAPA AMERICAN
3845	CANYON CAFE
3853	MUFTAH, GHUZI NOOR, HAMID
3860	CALIFORNIA DENTAL CARE CROWN REALTY PMPJ FARMERS INSURANCE GROUP
3863	OCCUPANT UNKNOWN,
3885	FABBRI STATUARY
3915	AC FOOD & LIQUOR BROADWAY MARKET
3919	ALL STAR HAIR SALON
3927	CITY NAILS & SPA SKY NAIL SALON
3945	TACOS MICHOACAN 2

MELVIN RD 2014

2 ARMIJO, RICCI S
4 OCCUPANT UNKNOWN,
9 OCCUPANT UNKNOWN,
10 OCCUPANT UNKNOWN,
11 LAKE CHABOT CONGREGATION
15 NAPA COUNTY MOSQUITO ABATEMENT DISTR
16 MOROFSKY, MIKE W
18 CONTRERAS, ISIDRO
22 MORRILL, CHARLES
26 OCCUPANT UNKNOWN,
30 DEHARO, MARIA E
33 HOLDER, LEONARD J
34 BENEFIEL, JOHN T
38 IMPERIAL, MARJORIE P
42 OCCUPANT UNKNOWN,
44 BYRON, MICHAEL S
48 MANSOUR, BASEM A
53 PAYNE, TONI
54 PAYNE, EDWARD A
56 BURKHOLDER, ROD L
58 FISH, CHARLES A
60 KEISER, JEFFREY P
62 MARCUS, RAY T
64 DONALDSON, ALBERT B
66 ANDERSON, BENJAMIN C



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ANTONINA AVE 2010

91	MEREDITH ASPRERBELTRAN INC
	REMAX GOLD
	RIVERPOINT RESORT
101	WINE COUNTRY DELI

BROADWAY ST 2010

3417 BELLAHIGH PERFORMANCE TANNING
 EYE CARE CTR OF NAPA
 HARVEST PEDIATRICS
 MALYS
 SUBWAY
 UMPQUA BANK
 3419 BETTER HOMES REALTY
 CANYON KAJUKENBO MARTIAL ARTS
 COLDWELL BANKER
 MASTER TECH
 TECH NORTH
 YUMMY GARDEN
 3421 AMERICAN CANYON LIBRARY
 WESTAMERICA BANK
 3423 SERENITY DAY SPA SALON
 3425 THAI KITCHEN AC
 3427 BOLT STAFFING SVC INC
 VALLEJO MOBILE HOME SALES
 3429 DAVID R YORK CPA MST
 K J NAILS
 REMAX GOLD
 SELECT MORTGAGE PLANNING
 STATE FARM INSURANCE
 TIFFYS
 TINO, LEA
 YORK, DAVID
 3431 AMERICAN CANYON DENTAL CARE
 AMERICAN CANYON FAMILY RSRC
 CURVES
 EXCEL CARE IMMEDIATE CARE CTR
 J N J BARBERSHOP
 MUNOZ, LESLIE
 NAPASOLANO MEDICAL GROUP
 3433 DAVID COULOMBE INSURANCE
 DE ANDA INSURANCE
 FARMERS INSURANCE GROUP
 FIRST AMERICAN TITLE INS CO
 HANGER PROSTHETICS & ORTHOTICS
 HOME INSTEAD SENIOR CARE
 STUDIO 29 HAIR DESIGN
 3434 OCCUPANT UNKNOWN,
 3436 GENERAL PLUMBING SUPPLY CO
 3448 BIG EASY CARWASH
 OCCUPANT UNKNOWN,
 3450 OCCUPANT UNKNOWN,
 3456 NAPA VALLEY RUG
 NAVAJO RUG CO
 3466 NAPA VALLEY CASINO
 3470 MASON, RENEE
 WILLIAMS, GARY D

BROADWAY ST 2010 (Cont'd)

3471 TFM PAINT BALL SUPPLY
3475 OCCUPANT UNKNOWN,
3477 HAIRWORKS SALON
3479 AMERICAN CANYON CITIZENS ECHO
3519 OCCUPANT UNKNOWN,
3600 GAIA NAPA VALLEY HOTEL
SPA GAIA
3631 BROADWAY LANDSCAPE MATERIALS
SINGH, SUNNY
3635 MID CITY NURSERY
3657 ADAMS TIRES SVC
3663 OCCUPANT UNKNOWN,
3665 MODESTO, ROWENA
3700 AMERICAN CANYON MINI & RV STGE
3800 FAIRFIELD INN NAPA
YHB NAPA LLC
3845 CANYON CAFE
3853 NOOR, Y
3860 CALIFORNIA DENTAL CARE
FARMERS INSURANCE GROUP
3863 OCCUPANT UNKNOWN,
3885 FABBRI STATUARY
3915 BROADWAY MARKET
3919 ALL STARS HAIR SALON
3927 NAILS & SPA CITY
3945 CAFFINO INC
RANCHO GRANDE

MELVIN RD 2010

2 ARMIJO, RICCI S
4 DILLON, EUGENE E
9 LLOYD, TRACY S
10 OCCUPANT UNKNOWN,
11 LAKE CHABOT CONGREGATION
15 NAPA COUNTY MOSQUITO ABATEMENT
16 OCCUPANT UNKNOWN,
18 GOMEZ, BERTHA E
22 GREEN, SONDRA A
26 CAMPOS, ENRIQUE M
33 HOLDER, OBIE B
34 BENEFIEL, TIM
38 OCCUPANT UNKNOWN,
42 VALLADARES, PETRONILLA
44 BYRON, MICHAEL S
48 WILLIAMS, PHYLLIS
54 PAYNE, EDWARD A
56 HART, JOHN H
58 FISH, CHARLES A
60 KEISER, JEFFREY P
62 MARCUS, RAY T
64 DONALDSON, ALBERT B
66 ANDERSON, BENJAMIN C

ANTONINA DR 2005

101 NAPA VISITOR CENTER

BROADWAY ST 2005

3417 THE VINTAGE BANK
 3419 AMERICAN CANYON CHAMBER O
 K T NOODLE
 MASTER TECHS
 MASTER, TECHS
 RE / MAX
 3425 PIZZA KING GOURMET
 3427 TAQUERIA ROSITA 2
 3429 AMERICAN CYN CHAMBER COMMERCE
 CANYON PLAZA MAIL CENTER
 CARRILLO, GEORGE C
 CONWELL, MICHELE
 CROW, CHARLES W
 GUTIERREZ, CESAR
 HAMMER MIKE
 HAMMER, MIKE
 HYDROSCIENCE ENGINEERS INC
 PRUDENTIAL CALIFORNIA REALTY
 SANTA CLARA INVESTMENTS
 STARR, NEDA J
 TINO, LEA
 URIBE, RITA L
 3431 AMERICAN CANYON DENTAL CARE
 LITTLE ANGEL PEDIACTRIC
 SMART WIRELESS
 V VELARDE MD
 VILLA, JULIA
 3433 COOK, ELDER A
 COULOMBS DAVID INSURANCE AGENCY
 DE ANDA INSURANCE
 FACEY JOHN K
 FACEY, JOHN K
 FIRST AMERICAN TITLE CO OF NAPA
 STUDIO 29 HAIR DESIGN
 3438 ULTRAMAR
 3439 SIGN FACTORY
 3450 SALAS, RACHEL
 3456 INTERNATIONAL TIMBER TRAD
 3458 AMERICAN CANYON PIZZERIA
 3460 CANYON MARKET
 3462 MIKES ARCO REDWOOD 76
 3470 GARCIA, MARISELA
 HOEHN, JENNIFER R
 JUAREZ, MARTHA
 MARTINEZ, JUAN
 PENA, CARLOS C
 SANCHEZ, ORLANDO
 WILDER, DONALD E
 3471 THE NAPA SOLANO POST
 3473 ALPHA REALTY

BROADWAY ST 2005 (Cont'd)

3475 OCCUPANT UNKNOWN,
3479 AMERICAN CANYON CITIZENS ECHO
3519 OCCUPANT UNKNOWN,
3657 ADAMS TIRES SERVICES
3663 OCCUPANT UNKNOWN,
3665 PEREZ, LEOCADIO M
3700 AMERICAN CANYON MINI & RV STORAGE
3751 NAPA COUNTY MOSQUITO ABATEMENT DISTR
3845 CANYON CAFE
3853 DETORO, DIANE C
3860 PALBYS RESTAURANT
3863 DELACY, MICHAEL D
3915 BROADWAY MARKET
3919 NOVA STYLE BEAUTY SALON
SKY COMMUNICATIONS
3921 REALTY WORLD PRIME VALLEY PROPERTIES
3945 RANCHO GRANDE

MELVIN RD 2005

2 ARMIJO, RICCI S
4 DILLON, EUGENE E
9 HOCHROT SPECIALTIES
LLOYD, TRACY S
10 TURNER, JEFF H
11 LAKE CHABOT CONGREGATION
16 MOROFSKY, RONALD M
18 BECKWITH, PATRICIA J
22 MORRILL, DANA C
26 CAMPOS, ENRIQUE M
33 HOLDER, OBIE B
34 BENEFIEL, JOHN T
38 OCCUPANT UNKNOWN,
42 VALLADARES, PETRONILLA
44 BYRON, MICHAEL S
48 DANIELS, AUBREY D
54 PAYNE, EDWARD A
56 DRY CREEK COMPUTING & NETWORKS
RIDLEY, JIM F
58 FISH, CHARLES A
60 KEISER, JEFFREY P
62 MARCUS T RAYMOND
MARCUS, RAY T
64 DONALDSON, ALBERT B
66 ANDERSON, BENJAMIN C



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ANTONINA DR 2000

101 NAPA SONOMA WINE COUNTRY VISITOR SERVICES CENTER
SONOMA VALLEY VISTORS CENTER

BROADWAY ST 2000

3420 OCCUPANT UNKNOWN,
 3430 OCCUPANT UNKNOWN,
 3431 OCCUPANT UNKNOWN,
 3436 GENERAL PLUMBING SUPPLY COMPANY
 3439 NOVELTY MANUFACTURING
 OCCUPANT UNKNOWN,
 3440 BEACON OIL COMPANY
 OCCUPANT UNKNOWN,
 3448 BOYD, KEVIN A
 3450 MCDANIEL, DORIS B
 3456 NAVAJO RUG CLEANING COMPANY
 VILLAGE RUGS
 3458 AMERICAN CANYON PIZZARIA
 OCCUPANT UNKNOWN,
 3460 CANYON MARKET
 3464 LONG BILL RANERI & LONG ROOFING COMPANY
 3466 OCCUPANT UNKNOWN,
 3470 GARCIA, MARIA R
 HERRERA, H
 PENA, VICENTE
 WILDER, DONALD E
 3471 RICARDO'S DRIVING SCHOOL
 3473 CENTURY 21 ALPHA REALTY
 OCCUPANT UNKNOWN,
 3475 BELYEA, SCOTT F
 3519 OCCUPANT UNKNOWN,
 3631 SPENCER, GREGORY P
 3635 MID CITY NURSERY
 3665 PEREZ, LEO
 3700 AMERICAN CANYON MINI & RV STORAGE
 MASON, AL
 3845 CANYON CAFE
 3915 BROADWAY MARKET
 U HAUL COMPANY INDEPENDENT DEALERS
 3919 LAWSONSS FURNITURE AND STUFF
 3945 ESPRESSO EXPRESS

MELVIN RD 2000

- 9 LLOYD, TRACY S
- 10 BROWN, LEMMIE E
- 11 LAKE CHABOT CONGREGATION
- 16 OCCUPANT UNKNOWN,
- 18 BECKWITH, P J
- 22 OCCUPANT UNKNOWN,
- 26 CAMPOS, ENRIQUE
- 30 SWANCUTT, LESLIE L
- 33 HOLDER, OBIE
- 34 BENEFIEL, TIM
- 38 THOMPSON, MILTON A
- 42 DAUGHTRY, JANA
- 48 DANIELS, MOORE A
- 54 OCCUPANT UNKNOWN,
- 56 OCCUPANT UNKNOWN,
- 58 OCCUPANT UNKNOWN,
- 60 KEISER, JEFFREY P
- 62 MARCUS, RAY
- 64 DONALDSON, ALBERT B

BROADWAY ST 1995

3416 FLORES, PAULA A
TABANERA, CEDRIC P
3418 OCCUPANT UNKNOWNN
3420 WHEELER, ELMER J
3422 OCCUPANT UNKNOWNN
3426 ARNOLD, RICHARD
3430 WILLIAMS, THOMAS B
3431 DAVIS STABLES
DAVIS, JACK D
3434 OCCUPANT UNKNOWNN
3436 OCCUPANT UNKNOWNN
3438 FAST GAS
3440 SPERELL, J
3448 OCCUPANT UNKNOWNN
3450 OCCUPANT UNKNOWNN
3460 LAWSON DRIVE IN MARKET
LAWSON VIDEO
3462 OCCUPANT UNKNOWNN
WILLIAMS ARCO
3464 OCCUPANT UNKNOWNN
3470 LONG, DON
3471 FIRST AMERICAN TITLE INS CO
NORTHERN ABATEMENT CO
3519 BAUDE, GLENN D
3548 J C HOME REALTY
3635 MID CITY NURSERY
3663 SANTOS, AMADOR
3665 PEREZ, L
3700 AMERICAN CANYON MINI & RV STRG
SEAMAN, CINDI C
3845 CANYON CAFE
3915 FLORES MARKET
3919 FURNITURE 4 LESS
4115 MOTHER TEMPLE

MELVIN RD 1995

4 DILLON, EUGENE
9 BATOR, WALTER A
10 BROWN, LEMMIE E JR
11 LAKE CHABOT CONGREGATION
16 BROWN, TINA
18 SPERRY, J
22 OCCUPANT UNKNOWNN
26 OCCUPANT UNKNOWNN
33 HOLDER, OBIE
34 BENEFIEL, TIM
38 THOMPSON, MILTON A
42 EPPARD, JESS
44 MCBROOM, JOHN R
54 LUCAS, HAROLD L
56 FOERDER, MICHAEL S
58 FISH, CHARLES A
60 OCCUPANT UNKNOWNN
62 MARCUS, RAY
64 DONALDSON, ALBERT B

BROADWAY ST 1992

3330 GLOS, ELTON C
3353 OMAI CLOTHING
ROBIN AIDS PROSTH
3430 WILLIAMS, THOMAS B
3431 DAVIS STABLES
3439 NOVELTY MFG INC
3440 BEACON OIL CO
3448 GONZALEZ, JULIA
3450 MCDANIEL, AUDREY
3456 NAVAJO RUG CLEAN
3458 J C HOME REALTY
OUR CITY OUR FUTURE
3460 LAWSON DRIVE IN MKT
3462 WILLIAMS GEO PETRLM
3471 FIRST AMER TITLE
NORTHN ABATEMENT CO
3475 MYRNAS
3519 BAUDE, GLENN D
3635 MID CITY NURSERY
3700 AMER CNYN MINI STRG
U HAUL CO DEALERS
3845 CANYON CAFE
3853 ALLEN, GEORGE A JR
3860 PALBYS RESTAURANT
3915 FLORES MARKET
3919 FURNITURE 4 LESS
3945 COUNTRY KITCHEN
4115 MOTHER TEMPLE

MELVIN RD 1992

- 4 WINSOR, ORVILLE R
- 9 BATOR, WALTER A
- 10 BROWN, LEMMIE E JR
- 11 LAKE CHABOT CNGRGTN
- 33 HOLDER, OBIE
- 34 BENEFIEL, TIM
- 38 THOMPSON, MILTON A
- 42 EPPARD, JESS
- 48 DAIGLE, J
- 58 FISH, CHARLES A
- 62 MARCUS, RAY
- 64 DONALDSON, ALBERT B

BROADWAY ST 1986

3420	WHEELER ELMER J	642-1956	
3422	ANDERSON J B	642-2610	0
3430	WILLIAMS THOS B	644-1285	
3431	DAVIS STABLES	554-4779	3
3434	XXXX	00	
3436	DICKS CAMRER&TRAILR	252-0644	3
	DICKS CMPR&THLR SLS	552-4926	7
3439	XXXX	00	
3440	FAST GAS	552-6422	0
3441	TIMBERLAND DISPLAY	552-2769	4
3443	XXXX	00	
3448	PELAYO EMILIO	552-8262	+6
3450	MCDANIEL AUDREY	553-6050	3
3456	NAVAJO RUG CLEAN	225-2173	6
	NAVAJO RUG CLEANING	643-4575	
	NAVAJO RUG CLNG CO	425-0550	3
	NAVAJO RUG CO	643-4575	4
3458	XXXX	00	
3460	HEALER MSAYS	552-5510	9
	LAWSON DRIVE IN MKT	542-2703	
	LAWSON VIDEO	642-2703	
3462	RICHS ARGO	552-9486	0
3464	COLLIE BENNIE	552-4183	3
3466	PARLAY CLUS	644-0417	
3470	SALINAS JOSE ANGEL	643-8938	3
3471	CANYON PROPERTIES	554-3000	6
	HCME COMFORT RLTY	554-3000	6
3475	ALOUETTE SPA	552-2337	5
3479	XXXX	00	
3519	XXXX	00	
3631	PAPOULIAS MARIA	554-4538	2
3636	MID CITY NURSERY	542-4167	
3655	XXXX	00	
3657	XXXX	00	
3659	XXXX	00	
3663	BUZARELLOS C	644-0201	
3665	LIPPINCOTT CHARLES	557-1131	+6
3700	AMER CNYN MINI STRE	642-7437	+6
3704	XXXX	00	
3740	XXXX	00	
3751	XXXX	00	
3846	A&W ROOT BEER	644-5011	
3853	ALLEN GEORGE A JR	642-3020	6
3853 ½	SCHULTZ JOHN T	557-4506	+6
3860	PALBYS GIFT SHOP	648-9399	+6
	PALBYS RESTAURANT	648-9399	+6
	WINKLER DONALD D	554-6610	+6
3883	XXXX	00	
3886	XXXX	00	
3915	DENNTS GENERAL STR	644-6065	
3946	PATTYS COOK HOUSE	552-1150	3
4116	MOTHER TEMPLE	648-9279	+6
4201	XXXX	00	
4206	XXXX	00	
4207	XXXX	00	
4209	FRITZ RECORDNG STDO	642-4569	+6
4211	NATL SANITARY CO	644-1668	3
4216	LARRYS CSTM ATO UPH	554-4255	3
	VINTAGE SOWL PIZZA	557-0374	6
	VINTAGE BOWL TICKET	557-6410	5
	VINTAGE SOWLING	557-0373	4
4221	XXXX	00	
4226	XXXX	00	

MELVIN RD 1986

MELVIN RD 94589

VALLEJO

4	WINSOR ORVILLE R	643-7152	
9	BATOR WALTER A	842-2004	
11	LAKE CHABOT CNCRGTM	643-6577	9
18	POLLETT TOM	643-8595	4
22	PALMER DALLAS	552-5247	8
26	XXXX	00	
33	HOLDER OSIE	842-4052	
34	BENEFIEL TIM	644-9833	
38	THOMPSON MILTON A	842-7196	
42	EPPARD JESS	644-2503	
44	MCBROOM JOHN	552-6385	9
58	XXXX	00	
58	FISH CARL	563-8298	1
	FISH CHARLES A	553-9922	1
82	XXXX	00	
64	DONALDSON ALBERT B	844-0582	2
66	XXXX	00	
★	1 BUS	18 RES	0 NEW

BROADWAY ST 1981

3420	WHEELER ELMER J	642-1956	4
3422	ANDERSON J B	642-2610	0
3430	WILLIAMS THOS B	644-1285	
3434	XXXX	00	
3436	DICKS CAMPR&TRLR SL	252-0644	9
	DICKS CMPR&TRLR SLS	552-4926	7
3439	XXXX	00	
3440	BARBOUR ROBT	644-7803	+1
	FAST GAS	552-9422	0
3441	D & D MOBILE HOMES	553-8150	+1
	HOME REALTY	644-4177	8
3443	DANCE WORKSHOP THE	552-3756	0
3456	NAVAJO RUG CLEANING	425-0550	+1
	NAVAJO RUG CLN	226-2173	+1
	NAVAJO RUG CO	226-2173	+1
3458	CUMMANS ANTIQUES	552-6323	0
3460	HEALER MEATS	552-5510	9
	LAWSON DRIVE IN MKT	642-2703	4
3462	RICHS ARCO	552-9486	0
3464	XXXX	00	
3466	PARLAY CLUB	644-0417	+1
3470	JAS RAM	642-0341	+1
	TOUGAS ANGIE E	644-1316	+1
3519	AMER CNYN INC	553-9074	+1
	BAUDE GLENN D	642-2262	+1
3631	NELSON TERESA	642-6145	+1
3635	MID CITY NURSERY	642-4167	
3655	XXXX	00	
3657	XXXX	00	
3659	XXXX	00	
3663	BUZARELLOS C	644-0201	
3700	PHILLIPS JAMES A	553-1235	+1
3704	BARRIOS LOUIE	643-9074	
3712	PAOLI ANGELO	643-6785	
3716	DONALDSON C	553-8459	+1
3751	AMER CNYN CO WATER	642-4478	
3787	OBANION INTERPRIZES	644-5515	6
	OBANION JOE	644-5516	9
	SHOOPMAN MIDGE	553-9231	+1
3845	A&W ROOT BEER	644-5011	5
3853	AVELLAR GARY L	644-7194	+1
3853½	MILLER E A	642-3553	0
3860	PALBYS RESTAURANT	552-9399	0
3863	XXXX	00	
3885	HANSEN F R LND CNTR	553-1554	0
3915	DENNYS GENERAL STR	644-6065	
3945	BARBS PLACE	552-1150	+1
4115	MOTHER TEMPLE	552-9279	0
4205	GALLERY THE	552-9016	0
	S&S PRODUCE	552-8755	0
4207	XXXX	00	
4209	RANCHO BEAUTY SHOP	553-1290	0
4211	H&S SALES	553-1921	0
4215	VINTAGE BOWL	642-7200	5
4221	XXXX	00	
4224	WINDERS PAUL D	644-2166	+1

MELVIN RD 1981

MELVIN RD 94590

VALLEJO

4	WINSOR ORVILLE R	643-7152	2
9	BATOR WALTER A	642-2004	
11	LAKE CHABOT CNGRGTN	643-8577	9
18	KOHR JOHN H	642-4325	5
22	PALMER DALLAS	552-5247	8
33	HOLDER OBIE	642-4052	
34	BENEFIEL TIM	644-9833	5
38	THOMPSON MILTON A	642-7196	4
42	EPPARD JESS	644-2503	
44	MCBROOM JOHN	552-6385	9
58	FISH CARL	553-8298	+1
	FISH CHARLES A	553-9922	+1
62	RUNAS ANTHONY D	553-8381	+1
★	1 BUS	12 RES	3 NEW

BROADWAY ST 1977

3416*	BIGGS C BLDG CONTR	642-4933+7
3420	WHEELER ELMER J	642-1956 4
3422	DAVIS CORBET	644-2163
3430	WILLIAMS THOS B	644-1285
3434	XXXX	00
3436*	DICKS CMPR&TRLR SLS	552-4926+7
3439	XXXX	00
3456*	NAVAJO RUG CLEANING	425-0550
	*NAVAJO RUG CLNG CO	643-4575 2
3458	XXXX	00
3460*	J&M MEAT CO	644-0882+7
	*LAWSON DRIVE IN MKT	642-2703 4
3462*	RICHS ARCO	643-9781 4
3464	STAGGS D K	643-3773+7
3466*	PAULS TAVERN	643-9693
3519	DUNN DENZIL A	643-8796+7
3635*	MID CITY NURSERY	642-4167
3655	XXXX	00
3657*	BILLS BAKRIES DONUT	643-4719+7
3659	XXXX	00
3663	BUZARELLOS C	644-0201
3700	CROWELL JOHN	643-5050 5
3704	BARRIOS LOUIE	643-9074
3712	PAOLI ANGELO	643-6785
3751*	AMER CNYN CO WATER	642-4478
3787*	OBANION INTERPRIZES	644-5515 6
3845*	A&W ROOT BEER	644-5011 5
3860*	PALBYS REST&GIFT SH	643-9438 6
3863	HOWARD B L	552-7773+7
3885*	KAHRER FRANK	642-7777 6
	*SESSIONS LNDSCP CO	642-7779 6
3915*	DENNYS GENERAL STR	644-6065
3945*	PIZZA KITCHEN	552-1150 6
4115*	MOTHER TEMPLE	643-9860 5
4205*	MARGIES TAVERN	552-9677+7
4211*	J&J TRUCKING	552-6513 6
4215*	VINTAGE BOWL	642-7200 5
4217	XXXX	00
4381*	JEANS MOBILE MVRS	552-6642+7
	TRUDEAU JEAN	552-6642+7
4391*	COLONY BAKERY	643-9835 2
	*NAPA GOLF CART SERV	643-9755 6
4625*	EARLS AUTO DISMNTLR	643-2591
	*EARLS AUTO DSMNTRS	255-0580 5
	*TOLLE EARL	255-0580 5
4841*	MORAN SUPPLY	644-4418+7
4890*	KOKOLIOS IRON WORKS	643-7112 5
4901*	BAILEY BROS SPD SH	642-7744 4
4903	XXXX	00
4910*	ADKERSONS METAL WRK	642-5015
	*DAISS BODY&FENDR SH	648-1681 5
	*GREEN WOODY	643-1519 4
	*LAWN SPRINKLER SYS	552-6888+7
	*NAPA VALLEJO BDY SH	644-3798 6
5353*	NAPA VLY REFRIGRATN	643-5071 5
5755*	MAHER PATRICK W	648-1426 5
	*MOTOR HOME SPCLSTS	643-8843 2
	*NORTHBAY ADJUSTERS	648-1426 5
NO #	*NAVY YARD SHELL	644-3336 2
	* 199 BUS 255 RES	71 NEW

MELVIN RD 1977

MELVIN RD 94590 VALLEJO

4	WINSOR	ORVILLE	R	643-7152	2
9	BATOR	WALTER	A	642-2004	
18	KOHR	JOHN	H	642-4325	5
33	HOLDER	OBIE		642-4052	
34	BENEFIEL	TIM		644-9833	5
38	THOMPSON	MILTON	A	642-7196	4
42	EPPARD	JESS		644-2503	
*	0	BUS	7 RES	0	NEW

BROADWAY ST 1974

643-1785

CRAWFORD WAY INTERSECTS

3420 Wheeler Elmer J © 642-1956
 3422 Davis Corbett A © 644-2163
 3426 Arnold Richd ©
 3430 Williams Thos B © 644-1285
 3431 Robinson Gerald W 644-5816
 3434 ★ Estigoy Antonio rest home 642-8833
 3436 Dick's Camper & Trailer Sales 691-4926
 3438 Freddy Fast Gas 643-9456
 3439 Gish Robt W © 642-2827
 3440 Hodges Rest Home 642-1706
 3441 Vacant
 3443 Chickie's Variety Dance Studio 642-1558
 3448 Hodges Rest Home
 3456 Navajo Rug & Upholstery Cleaners
 643-4575
 3458 Vacant
 3460 Lawson's Drive In Market 642-2703
 U S Postal Serv (American Canyon Br)
 642-2703

DONALDSON WAY INTERSECTS**FRISBEE LA INTERSECTS**

3462 Rick's Arco Service 643-9781
 3464 ★ Newell Monica
 3466 Paul's Tavern 643-9693
 3631 Papoulias Mary Mrs © 642-3066
 3635 Mid-City Nursery 642-4167
 3655 Deal Wayne
 3657 Payless Lumber 643-4736
 3659 Roderick's Well Digger Rentals 643-8518
 3663 Buzarellos Michl N © 644-0201
 3665 Swanson Arth A
 3700 ★ Crowell John
 3702 ★ Haskins Douglas
 3704 Barrios Louis 643-9074
 3710 Paoli Ronald L 642-2845
 3712 Paoli Angelo 643-6785
 3716 ★ Miller Richd J 691-0696
 3751 American Canyon County Water Dist
 642-4478
 3787 Vacant
 3845 A & W Root Beer 644-5011
 3853 ★ Crandell Willie D 691-5290
 3853½ Vacant
 3860 Palby's restr 643-9438
 Freskan Peter © 643-9438

POCO WAY INTERSECTS**SO NAPA JUNCTION RD INTERSECTS**

3863 Howard Burl L
 3915 Denny's General Store 644-6065
 3945 Pizza Kitchen 691-1150

RIO DEL MAR INTERSECTS

4115 Johnson Mary Mrs palmist 643-9860
 Williams Laura palmist
 4205 Margie's Tavern 643-9271
 4207 Vacant
 4209 Vacant
 4211 Jean's Mobile Movers transport serv
 691-6642
 4213 Vacant
 4215 Town & Country Bowl 644-9743
 4217 Vacant
 4219 Vacant
 4225 Hughes Plywood Co 643-4084
 5755 ★ Maher Patk W © 648-1426

MELVIN RD 1974

**MELVIN RD (RANCHO DEL MAR)
FROM 31 CASSAYRE DR EAST****ZIP CODE 94590**

- 4 Winsor Orville © 643-7152
9 Bator Walter A © 642-2004
10 Doran John H ©
16 Marofsky Ronald M ©
18 Kohr John © 642-4325
22 Bullock Dale 644-5426
26 No Return
30 Benefiel John W © 644-9837
33 Holder Obie B © 642-4052
34 Vacant
38★Thompson Milton A © 642-7196
42 Eppard Jessie © 644-2503
-

BROADWAY ST 1970

3420 Henriques Bill
 3422 Davis Corbett A © 644-2163
 3426 Arnold Wesly B ©
 3430 Williams Thos B © 644-1285
 3431 Robinson Gerald W 644-5816
 3434 Mendoza Manuel 644-2043
 3439 Gish Robt W © 642-2827
 3440 Warthen M Ray © 644-7381
 3448 Davis Bob A 643-8796
 3456 Navajo Rug & Upholstery Cleaners
 643-5192
 3458 Broadway Coin Laundry
 3460 Ascherman's Drive In Market 642-2703
 Miller's Meat Market 642-2703
 U S P O (American Canyon · Br)
 3462 Rich & Bill's Richfield Service 643-9781
 3464 Lynch Richd R 648-1654
 3466 Paul's Tavern 643-9419
 3631 Papoulias Gus © 642-3066
 3635 Mid-City Nursery 642-4167
 3655 Vacant
 3657 Payless Lumber 643-4736
 Mc Bride Patrick G
 3659 Rodrick Joe
 3663 Buzarellos Michl N © 644-0201
 3665 Swanson Arth A 644-7821
 3700 Vacant
 3702 Vacant
 3704 Barrios Louis 643-9074
 3710 Paoli Ronald L 642-2845
 3712 Paoli Angelo 643-6785
 3751 American Canyon County Water
 District 642-4478
 3787 A & A Metal Products aluminum
 products 642-5576
 3845 A & W Root Beer 643-9707
 3852 Wikes Robt L 644-0794
 3853½ Vacant

BROADWAY ST 1970

BROADWAY ST—Contd

3860 Palby's restr 643-9438
 Freskan Peter © 643-9438
 3863 Howard Dianne © 648-1389
 3915 Denny's General Store 644-6065
 3945 Chickie's Drive-In restr 643-9224
 4115 Johnson Mary Mrs palmist 643-9860
 4203 Vacant
 4205 Le Red Garter Tavern
 4207 Vacant
 4209 Town & Country Beauty Salon
 644-7319
 4211 Vacant
 4213 Vacant
 Vacant
 4213a Vacant
 4215 Burgundy Room tavern 643-9243
 Vintage Bowl 644-9743
 4217 Vacant
 4225 Hughes Plywood Co 643-4084
 Hughes John 643-4084

MELVIN RD 1970

85

**MELVIN RD —FROM 31 CASSAYRE DR
EAST**

ZIP CODE 94590

- 4 Winsor Orville © 643-7152
 - 9 Bator Walter A © 642-2004
 - 10 Doran John H ©
 - 16 Foulk Robt R ©
 - 18 Kohr John © 642-4325
 - 22 Foulk Robt M © 643-8138
 - 26 Mc Kee Rodney P © 643-5052
 - 30 No Return
 - 33 Holder Obie B © 642-4052
 - 34 Biggs Hubert M © 644-0338
 - 38 Dell Frank I © 643-4372
 - 42 Eppard Jessie © 644-2503
-

BROADWAY ST 1965

644-7210

3302 MURPHY ALICE MRS

3306 DEAKINS GUY O

644-4309

3312 OLDS JAY A JR

644-7391

3318 TRI CITIES

DISTRIBUTING CO

642-9414

3330 GLCS ELTON C •

643-2686

3353 ROBIN-AIDS

ORTHOPEDIC

APPLIANCES 642-2727

3422 DAVIS CORBETT A •

644-2163

3426 HARTER RONALD E •

642-3334

BROADWAY ST 1965

BROADWAY ST--CONTD
 3430 WILLIAMS THOS B •
 644-1285
 3431 HERBIE'S HENNERY
 EGGS 642-6398
 HELM WM • 643-9686
 3434 MC JUNKIN ROBT
 644-0869
 3439 GISH ROBT W •
 642-2827
 3440 WARTHEN M R •
 644-7381
 3448 BROOKS LOUISE J MRS
 644-7687
 3456 NAVAJO RUG &
 UPHOLSTERY CLEANERS
 643-5192
 3460 ASCHERMAN'S DRIVE IN
 MARKET GROS
 642-2703
 ASCHERMAN CALVIN •
 642-2703
 MILLER'S MEAT MARKET
 642-2703
 3462 GRADY'S RICHFIELD
 SERVICE GAS STA
 643-9781
 3466 MERLE'S TAVERN
 643-9744
 3631 PAPCULIAS GUS •
 642-3066
 3635 MID-CITY NURSERY
 PLANTS 642-4167
 3657 BUILDER'S MART
 643-1221
 3657A NC RETURN
 3663 BUZARELLOS MICHL N •
 644-0201
 3665 OSTERBERG ALBERT A
 3700 SPILLMAN ARTH
 3702 BUZARELLOS GEO
 3704 BARRIOS LOUIS
 643-9074
 3708 FARQUHAR CHARLES
 3710 PAGLI RONALD L
 642-2845
 3712 PAGLI ANGELO
 643-6785
 3714 MIKE'S FRUIT STAND
 3751 A & A METAL PRODUCTS
 AWNINGS 642-5576
 3787 THOMPSON RAYMOND G •

3845 A & W ROOT BEER
 RESTR 643-9707
 3853 CAMP FRANK 642-9060
 3853½ O'GRADY WM
 3860 PALBY'S RESTR
 643-9438
 PALBY'S FISHING
 643-9438
 PATIO GIFTS 643-9438
 FRESKAN PETER •
 643-9438
 3863 NORDGARD FRED •
 642-9498
 3915 MOBILE GROCERY GROS
 643-4423
 WEED SHIRLEY MRS •
 644-4423
 3945 CHICKIE'S DRIVE-IN
 RESTR 643-9534
 4115 JOHNSON MARY MRS
 643-9860
 4213 ED'S GARAGE AUTO
 REPR 643-5926
 MIDWAY AUTO SERVICE
 GAS STA 643-5926

 70
 BROOKE DR -FROM DRYDEN DR
 EAST 1 NORTH OF
 FERNWOOD

 84
 BROOKWOOD DR -FROM
 GREENWOOD AV SOUTH

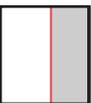
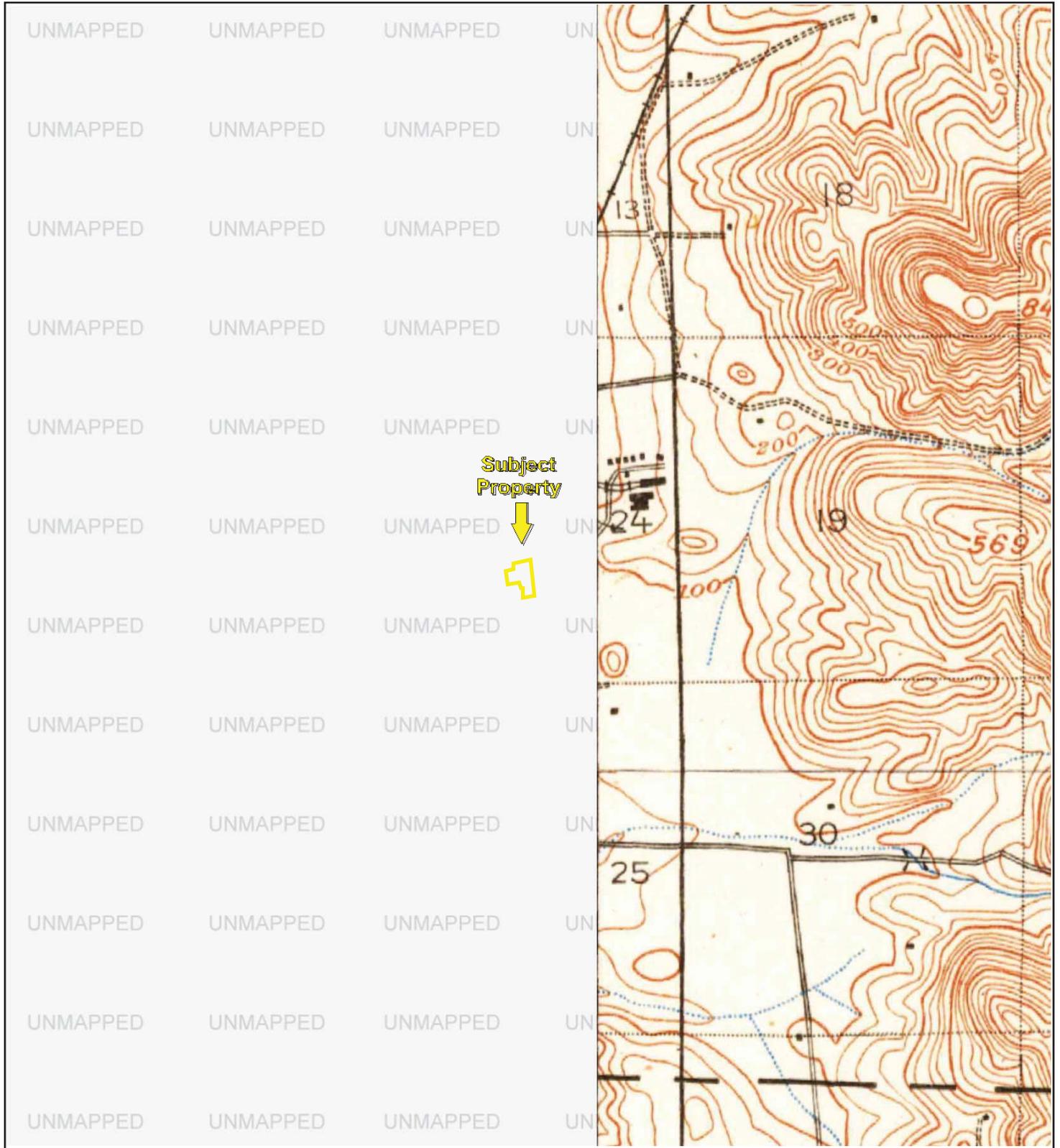
802 BARCN ROBT L •
 644-3215
 803 FISTER WALTER M
 642-2468
 812 BOYSEN ERIE R •
 642-3340
 813 WILCOX HARRY •
 642-4274
 818 BETTENCOURT VERN F •
 643-7705
 819 LARSON BETTY L MRS •
 824 FITZER JACK H •
 643-5728
 825 DUFFIELD GILBERT W •
 642-7175

MELVIN RD 1965

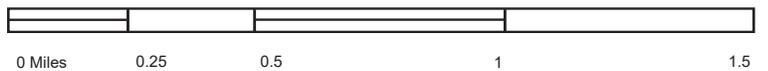
85

MELVIN RD -FROM CASSAYRE
DR EAST

- 9 BATOR WALTER A •
642-2004
- 10 DORAN JOHN H •
- 16 CORRINGTON ROBT L
- 18 MARKS MERVYN C
643-1092
- 22 STOUT HUBERT H •
642-2792
- 26 TEVES FRANK H •
644-2295
- 30 MC NEILL RAYMOND
- 33 HOLDER CBIE B •
642-4052
- 34 BIGGS HUBERT M •
-



SE, Carquinez Strait, 1896, 15-minute



Key: Subject Property

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Please complete to the best of your knowledge. For those questions that are not applicable, please respond with an "N/A". For those questions that are unknown, please respond with "unknown".

1. PROPERTY INFORMATION:

Property Name:		
Property Address: 1601-1991 Nelson Ave, Oroville, CA 95965		
City	State	Zip
Assessor's Parcel Number Butte County APN # 030-032-002, 030-033-001, & 030-033-002 (3 Parcels total)		
Property Owner & Contact Information:		
Date Property Owner Purchased: 10+ Years, Property is Lender Owned Acquired from a foreclosure		
Key Site Manager & Contact Information: Gary Lee 916-595-4279		

2. COMPLETED BY

Signature 	Date 06-10-2021
Printed Name Gary Lee	Relation to Subject Property Listing Agent

3. PREVIOUS INVESTIGATIONS

Have any previous environmental investigations been performed at the property, including Phase I ESAs, Phase II Subsurface Investigations, Remediation, Asbestos or Lead-Based Paint surveys? Sellers are Lenders, they have not done any inspections.

(If yes, please provide copies)

4. PROPERTY DESCRIPTION

Property Size: 80 Acres Number of Building(s): ZERO

Size of Building(s): Raw Land

Date of Construction: _____

Property Type: (please circle)

Multi-Family Hotel Mobile Home Park Retail/Commercial Industrial Office

Raw Land

Other: _____

Please provide Rent Roll if Applicable.

Historical Use of Property: NA

5. SURROUNDING PROPERTY USES



GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

April 16, 2020

Project No. 034-20013

Mr. Pete Harispuru
Highridge Costa Development Company
330 W. Victoria Street
Gardena, California 90248
pete.harispuru@housingpartners.com

RE: DRAFT Phase I Environmental Site Assessment
American Canyon Apartments Property
Broadway Street
APNs 058-362-005, -016 and -021
American Canyon, California 94503

Dear Mr. Harispuru:

Krazan & Associates, Inc., (Krazan) completed a Phase I Environmental Site Assessment at the referenced site summarized in a report dated April 16, 2020. We appreciate the opportunity to serve your environmental due diligence needs. During the course of this assessment, Krazan identified the following evidence of recognized environmental conditions (RECs), potential areas of concern (PAOCs) and site development issues in conjunction with the subject site.

RECs

- Although the current parcels which comprise the subject site are not associated with addresses in title company databases, available historical data and existing address range information indicate that the structures previously located on site were associated with addresses of 3751 and 3787 Broadway Street (the southern adjoining property is addressed as 3663/3665 Broadway Street and the northern adjoining property is addressed as 3845 Broadway Street). Structures were historically located in the northern portion of subject site parcel 058-362-016 and in an area adjoining this location in the southern portion of subject site parcel 058-362-021. Based on current address ranges, the structures previously located in 058-362-016 are presumed to have been associated with the 3751 Broadway Street address and those located in 058-362-021 to have been associated with 3787 Broadway Street. However, as indicated previously, the historical on-site structures were located in adjoining portions of these two parcels and may have shared one or both addresses at some point historically. Furthermore, Krazan's research has revealed a record dated June 1, 1988 contained in a historical California State Water Resources Control Board database which indicates that a 550-gallon unleaded gasoline underground storage tank (UST) was located at the apparent historical subject site address of 3751 Broadway Street. The 550-gallon gasoline UST is listed as a tar-wrapped steel tank with underground suction piping. The installation date of the gasoline UST is listed as 1983 at a "maintenance building" associated with the 3751 Broadway Street address in American Canyon.

Although records are included in the Napa County Environmental Services Department (NCESD) Electronic Document Retrieval database for the 3751 Broadway Street address, no records related to the installation or removal of an underground storage tank are included in the database for this address. Additionally, Mr. Bruce Peters, a representative of D'Ambrosio Brothers Investment Company, the owner of the subject site, indicated that he has been familiar with the subject site for the past 20 years and is unaware of the current or historical presence of a UST on the subject site. Consequently, no records pertaining to the installation, operation, or removal of the UST reportedly located at the apparent historical subject site address of 3751 Broadway Street were identified during the course of this assessment, and thus there is no documentation indicating that the 550-gallon gasoline UST has been removed from the subject site. Furthermore, if the UST was removed from the subject site, there is no record of standard UST closure activities such as subsurface sampling to document the condition of the subsurface at removal. Given the time frame in which the gasoline UST was reportedly installed (1983) and the above-referenced information contained in the State Water Resources Control Board database, it is possible that a steel tank and steel product distribution lines without corrosion protection are currently or were formerly located on the subject site and the condition/structural integrity of this tank and product distribution lines during the time of operation are unknown. Given the above-referenced considerations, the potential exists for an unauthorized release(s) of gasoline to have occurred as the result of the historical operation of this 550-gallon UST, distribution lines and fuel dispenser on site for an extended period of time circa 1983, and the presence or absence of the UST and the condition of the subsurface of the subject site proximate to this reported gasoline UST and related equipment is unknown.

Krazan recommends conducting a Phase II limited subsurface survey and a limited subsurface assessment in the inferred vicinity of the former on-site structures previously located in subject site parcel 058-362-016 to assess the presence or absence of subsurface metallic anomalies characteristic of underground storage tanks and related equipment and the potential concomitant subsurface impacts. If a UST and piping are identified, they should be removed in accordance with State and local guidelines, including subsurface soil sampling. If the location of a former UST and piping is identified, Krazan recommends conducting a Phase II limited subsurface assessment to evaluate the presence or absence of a potential significant impact by the constituents of concern (COCs) proximate to the former UST and piping.

PAOCs

- As alluded to previously, Krazan's review of historical aerial photographs indicates that a structure was present in the southern portion of the parcel 058-362-021/3787 Broadway Street location circa 1952, roughly 30 years prior to the reported installation of the above-referenced UST at the southern adjoining property in 1983. Mr. Peters, familiar with the subject site since approximately 1999, indicated that he was unaware of USTs being located at the subject site and, as indicated previously, no records of USTs for the subject site are on file with the local regulatory agencies. However, USTs on rural or agricultural properties historically have been exempt from requirements for registration with regulatory agencies. Krazan's experience with such properties has shown that it is not uncommon for property owners/operators to install USTs in agricultural settings for their convenience, especially in the vicinity of structures, which are undocumented and whose presence would remain unknown in spite of the standard data research conducted in the course of this Phase I ESA. It is therefore possible that subsurface features such as unregistered USTs may exist in the vicinity of the former on-site structures historically located in subject site parcel 058-362-021 which remain unknown based upon the absence of any regulatory, municipality, interview data, or other evidence indicating their presence or location. Consequently, despite an absence of data suggesting their presence, the presence or absence of

KRAZAN & ASSOCIATES, INC.
With Offices Serving the Western United States

034-20013 American Canyon Apartment Property Phase I Report Draft.doc

USTs associated with subject site parcel 058-362-021 prior to knowledge of the current owner of the subject site is unknown.

Krazan recommends expanding the Phase II limited subsurface survey recommended previously to include the inferred vicinity of the former on-site structures previously located in subject site parcel 058-362-021 to assess the presence or absence of subsurface metallic anomalies characteristic of underground storage tanks or related features. If a UST is identified, it should be removed in accordance with State and local guidelines, including subsurface soil sampling.

- During Krazan's March 30, 2020 site reconnaissance, an elongated ridge of apparently mounded soil was observed in the central-western and central portions of the subject site (parcel 058-362-021). Although this ridge and the majority of the subject site was densely covered in grasses/weeds which were relatively tall in places, the ridge appeared to be approximately one to three feet above surrounding grade dependent upon location. The ridge of mounded soil appeared to extend from the western property boundary eastward for approximately 150 to 200 feet with a maximum width of approximately 25 feet. No odors, surface staining, stressed vegetation or other obvious evidence of the presence of hazardous materials were noted in association with the apparent soil mound; however, surface soils were not generally visible due to the density of vegetation present.

Mr. Bruce Peters, a representative of the owner of the subject site, indicated via his responses to an environmental questionnaire that he has no knowledge of the presence of imported soil on the subject site, and no information concerning the origin of this apparent soil mound was obtained during the course of this assessment. It is therefore possible that this soil mound/ridge contains imported soil of unknown/undocumented origin. Krazan's experience indicates that imported soil can be contaminated with agricultural chemicals or other hazardous materials, dependent upon the specific location from which the soil is derived, and that the risk of contamination is increased for illegally disposed soils. Consequently, the origin and composition of the soil contained within this on-site soil mound/ridge related to potential contaminants is unknown relative to future use in redevelopment of the property or for disposal purposes.

- *For a higher level of due diligence, Krazan recommends that soil samples be collected from the on-site soil mound/ridge and analyzed to assess the presence or absence of potential significant concentrations of constituents of concern to determine whether or not the soils can be spread on site at the time of redevelopment or for disposal purposes, if found to be warranted.*

Site Development Issues

- Records on file with NCESD indicate that a water well located on subject site parcel 058-362-016 was properly destroyed in May/June 2004. However, Krazan's review of historical aerial photographs indicates that a structure was located within the southern portion of subject site parcel 058-362-21 circa 1952. A water well and/or septic system were possibly associated with the former on-site structures. If a water well or septic system are identified during the planned redevelopment of the subject site, they should be properly abandoned/closed or destroyed in accordance with State and local guidelines.

Our firm specializes in full-service Site Development Engineering with considerable project management experience. When you are interested in proceeding with the recommended work, Krazan can evaluate

your unique circumstances and prepare a Phase II Proposal/Cost Estimate for the additional assessment including the proposed scope of work, budget, and anticipated project schedule.

If you have any questions regarding the information presented in this report, please call me at (559) 348-2200.

Respectfully Submitted,
KRAZAN & ASSOCIATES, INC.

DRAFT

Arthur C. Farkas, REA No. 07818
Environmental Professional

ACF/mlt

**DRAFT PHASE I ENVIRONMENTAL
SITE ASSESSMENT
AMERICAN CANYON APARTMENTS PROPERTY
BROADWAY STREET
APNs 058-362-005, 016 AND -021
AMERICAN CANYON, CALIFORNIA 94503**

Pursuant to ASTM E 1527-13

Project No. 034-20013
April 16, 2020

Prepared for:
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TABLE OF CONTENTS
Project No. 034-20013

1.0 EXECUTIVE SUMMARY.....	1
2.0 PURPOSE AND SCOPE OF ASSESSMENT	2
2.1 Purpose	2
2.2 Scope of Work.....	3
3.0 SITE DESCRIPTION.....	3
3.1 Geology and Hydrogeology	4
4.0 SITE RECONNAISSANCE	4
4.1 Observations	5
4.2 Utilities	6
4.3 Adjacent Streets and Property Usage	7
4.4 ASTM Non-Scope Considerations	8
5.0 USER-PROVIDED INFORMATION.....	11
5.1 Environmental Liens/Activity and Use Limitations Report	11
5.2 Title Report.....	12
5.3 Phase I Environmental Site Assessment User Questionnaire.....	12
6.0 SITE USAGE SURVEY	13
6.1 Site History.....	13
6.2 Interviews	17
6.3 Agricultural Chemicals.....	18
6.4 Regulatory Agency Interface.....	18
6.5 Regulatory Agency Lists Review	22
7.0 DISCUSSION OF FINDINGS	29
7.1 Evaluation of Data Gaps/Data Failure.....	30
8.0 CONCLUSIONS/OPINIONS	31
9.0 RELIANCE.....	33
10.0 LIMITATIONS	33
11.0 QUALIFICATIONS.....	34
REFERENCES.....	36
GLOSSARY OF TERMS.....	38

Maps

Figure No. 1: Vicinity Map.....	following Glossary of Terms
Figure No. 2: Site Map.....	following Figure No. 1
Figure No. 3: Topographic Map	following Figure No. 2

Color Photographs

Photographs	following Figure No. 3
-------------------	------------------------

TABLE OF CONTENTS (continued)
Project No. 034-20013

Appendices

AFX Corp., Inc., Environmental Lien/Activity Use Limitations Report.....	A
Title Company Preliminary Title Report	B
Phase I ESA User Questionnaire	C
Environmental Data Resources, Inc. (EDR) Historical Aerial Photographs.....	D
EDR City Directory Report Image Report.....	E
EDR Sanborn Fire Insurance Map <i>No Coverage</i> Letter	F
Phase I ESA Owner Questionnaire	G
Napa County Environmental Health Services Department Records.....	H
California Water Resources Control Board UST Record	I
EDR Radius Map Report	J
Professional Resumes	K



GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

April 16, 2020

Project No. 034-20013

**DRAFT PHASE I ENVIRONMENTAL SITE ASSESSMENT
AMERICAN CANYON APARTMENTS PROPERTY
BROADWAY STREET
APNs 058-362-005, 016 AND -021
AMERICAN CANYON, CALIFORNIA 94503**

1.0 EXECUTIVE SUMMARY

Krazan & Associates, Inc. (Krazan) has conducted a Phase I Environmental Site Assessment (ESA) of the American Canyon Apartments Property associated with Napa County Assessor's Parcel Numbers (APNs) 058-362-005, -016 and -021 located on Broadway Street in American Canyon, California 94503 (subject site). It is incumbent upon the user to read this Phase I ESA report in its entirety. If not otherwise defined within the text of this report, please refer to the Glossary of Terms Section following the References Section for definitions of terms and acronyms utilized within this Phase I ESA report. Krazan conducted the Phase I ESA of the subject site in conformance with the American Society for Testing and Materials (ASTM) E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. This Phase I ESA constitutes all appropriate inquiry (AAI) designed to identify recognized environmental conditions (RECs) in connection with the previous ownership and uses of the subject site as defined by ASTM E 1527-13.

ASTM E 1527-13 Section 1.1.1 *Recognized Environmental Conditions* – In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

Krazan's findings of this Phase I ESA revealed the following evidence of recognized environmental conditions (RECs), potential areas of concern (PAOCs) and site development issues in connection with the subject site:

RECs

- The reported installation of a gasoline underground storage tank (UST) at the apparent historical subject site address of 3751 Broadway Street in 1983 with no documentation identified during the course of this assessment as to its location, installation, structural integrity while in operation, or condition at removal, if removed.

PAOCs

- The potential presence of an unregistered farm UST located in subject site parcel 058-362-021 associated with a structure(s) formerly located in a historical agricultural setting in the southern portion of this parcel circa 1952.
- The potential presence of hazardous materials associated with an elongated mound of potentially imported soil of unknown origin observed in the western and central portions the subject site parcel 058-362-021.

Site Development Issues

- The potential presence of water wells and/or septic systems on site which should be removed/abandoned/destroyed if identified and not to be utilized in the planned redevelopment of the subject site.

Please refer to Section 8.0 Conclusions/Opinions for a discussion of the findings included in this summary.

2.0 PURPOSE AND SCOPE OF ASSESSMENT**2.1 Purpose**

According to ASTM E 1527-13, the purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment* of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitation on CERCLA liability (hereinafter, the *landowner liability protections, or LLPs*): that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B).

2.2 Scope of Work

The Phase I ESA includes the following scope of work: a) a site reconnaissance of existing on-site conditions and observations of adjacent property uses, b) a review of user-provided documents and search of available current land title records compiled by AFX Corp., Inc., c) a review of historical aerial photographs, a review of pertinent building permit records, cross-reference directories, historical Sanborn Historical Fire Insurance Maps (HFIMs), and interview(s) with person(s) knowledgeable of the previous and current ownership and uses of the subject site, d) a review of local regulatory agency records, and e) a review of local, state, and federal regulatory agency lists compiled by Environmental Data Resources, Inc. (EDR). The scope of work for this Phase I ESA conforms to ASTM E 1527-13. Krazan was provided written authorization to conduct the Phase I ESA by Mr. Mohannad Mohanna with Highridge Costa Development Company, LLC on March 12, 2020, in Krazan's March 9, 2020 Proposal/Cost Estimate No. P20-071.

3.0 SITE DESCRIPTION

The subject site is located west of Broadway Street (aka Highway 29/Napa Vallejo Highway) and approximately 630 feet to the south of Poco Way within the City of American Canyon, Napa County, California. The subject site consists of three parcels collectively measuring approximately 3.6 acres with the associated Napa County Assessor's Parcel Numbers of 058-362-005, -016 and -021. The subject site is currently vacant land which is associated with the apparent historical subject site addresses of 3751 and 3787 Broadway Street. The subject site appears to have been developed with one of more structures from at least 1952 to at least 2004.

General property information and property use are summarized in the following Table I. Refer to Figures No. 1 – 3 following the Reference Section.

TABLE I
Subject Site Information Summary

Current Owner:	D'Ambrosio Brothers Investment Company
Assessor's Parcel Numbers:	058-362-005, -016 and -021
Address:	Broadway Street American Canyon, California 94503
Historical Address*:	3751 Broadway Street 3787 Broadway Street
General Location:	West of Broadway Street (Highway 29/Napa Vallejo Highway) and approximately 630 feet to the south of Poco Way
Acreage:	3.6 acres (approximately)
Existing Use:	Vacant land

TABLE I (continued)
Subject Site Information Summary

Number of Buildings:	None
Original Construction Date:	N/A
Proposed Use:	Multi-family Residential
Topographic Map:	U.S. Geological Survey, 7.5-minute Cuttings Wharf, California topographic quadrangle map, dated 1949, photorevised
Topographic Map Location:	Southern half of Section 24, Township 04 North, Range 014 West, Mount Diablo Baseline and Meridian
Latitude/Longitude:	38.17452° / -122.25474.°
Topography:	Relatively flat, approximately 60 feet above mean sea level
Approximate Depth to Groundwater:	5 feet below ground surface (bgs), State of California Regional Water Quality Control Board (RWQCB), Geotracker Database, vicinity environmental investigation/remediation site located approximately 825 feet to the south-southeast of the subject site
Regional Groundwater Flow Direction:	Southeasterly, RWQCB, Geotracker Database, vicinity environmental investigation/remediation site located 825 feet to the south-southeast of the subject site

* Historical addresses were obtained via review of State and county environmental regulatory agency databases.

3.1 Geology and Hydrogeology

The subject site is located in the southern portion of the Napa Valley within the Coast Range mountain system of California. Originally forming a near continuous blanket over the whole region, these mountains have since been segmented by faulting, folding, and erosion. Soils in the region were derived from in-place weathering of the igneous and metamorphic rock, and range from tens to hundreds of feet in depth. The surface layer is grayish brown moderately alkaline silty clay loam approximately 20 inches thick and the underlying material is dark gray moderately alkaline clay to a depth of 60 inches or more. Data obtained from an environmental investigation site located approximately 825 feet to the south-southeast of the subject site indicates that groundwater in the area of the subject site is first encountered at a depth of approximately 5 feet bgs. Groundwater monitoring conducted at the above-referenced site indicates that the groundwater flow direction in the vicinity of the subject site is southeasterly.

4.0 SITE RECONNAISSANCE

A site reconnaissance, which included a visual observation of the subject site and surrounding properties, was conducted by Mr. Bill Vick, Krazan's Environmental Professional, on March 30, 2020. Krazan's Environmental Professional was unaccompanied during the site reconnaissance. The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental

conditions, including hazardous substances and petroleum products, in connection with the property (including soils, surface waters, and groundwater).

4.1 Observations

The following Table II summarizes conditions encountered during our site reconnaissance. A discussion of visual observations is presented in the following table. Refer to the Site Map (Figure No. 2) and color photographs following the text for the locations of items discussed in this section of the report.

TABLE II
Summary of Site Reconnaissance

Feature	Observed	Not Observed
Structures (existing)		X
Evidence of Past Uses (foundations, debris)	X	
Hazardous Substances and/or Petroleum Products (including containers)		X
Aboveground Storage Tanks (ASTs)		X
Underground Storage Tanks (USTs) or Evidence of USTs		X
Evidence of Underground Pipelines		X
Strong, Pungent, or Noxious Odors		X
Pools of Liquid Likely to be Hazardous Materials or Petroleum Products		X
Drums		X
Unidentified Substance Containers		X
Potential Polychlorinated Biphenyl (PCB)-Containing Equipment	X	
Subsurface Hydraulic Equipment		X
Heating/Ventilation/Air conditioning (HVAC)		X
Stains or Corrosion on Floors, Walls, or Ceilings		X
Floor Drains, Sumps, or Oil/Water Clarifiers		X
Storm Drains		X
Pits, Ponds, or Lagoons		X
Stained Soil and/or Pavement		X
Soil Piles/Mounded Soil	X	
Stressed Vegetation		X
Waste or Wastewater (including stormwater) Discharges to Surface/ Surface Waters		X
Wells (irrigation, domestic, dry, injection, abandoned, monitoring wells)		X
Septic Systems		X

The subject site comprises approximately 3.6 acres of vacant land with the associated Napa County APNs of 058-362-005, -016 and -021. Refer to Figure No. 2, Site Map, for locations of the following referenced on-site features:

- The subject site was observed to be relatively flat, vacant land populated by native vegetation (See Photographs No. 1 - No. 10). However, remnants of the historical development of the subject site were observed in the central portion of the subject site (northwestern portion of parcel 058-362-016 and central-southern portion of parcel 058-362-021), including apparent building foundations, demolition debris, asphalt pavement remnants, twin electric service meters, and a small subsurface utility vault (See Photographs No. 11 – No. 15). Additionally, access ports for a main municipal sewer line and an apparent sewer main vent were observed in the southeastern

KRAZAN & ASSOCIATES, INC.

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034-20013 American Canyon Apartment Property Phase I Report Draft.doc

corner of the subject site adjacent to Broadway Street (See Photograph No. 17). No structures were observed on the subject site.

- Housekeeping conditions were observed to be good throughout the subject site. No obvious evidence of surface waste disposal was observed on the subject site. However, an elongated ridge of apparently mounded soil was observed in the central-western and central portions of the subject site (parcel 058-362-021). Although this ridge and the majority of the subject site was densely covered in grasses/weeds which were relatively tall in places, the ridge appeared to be approximately one to three feet above surrounding grade dependent upon location. The ridge of mounded soil appeared to extend from the western property boundary eastward for approximately 200 feet with a maximum width of approximately 25 feet. No odors, surface staining, stressed vegetation or other obvious evidence of the presence of hazardous materials were noted in association with the apparent soil mound; however, surface soils were not generally visible due to the density of vegetation present.
- During the visual observations of the subject site, no hazardous materials or hazardous waste were observed. Exposed surface soils did not exhibit obvious signs of discoloration. No obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs was noted within the areas observed. No standing water or major depressions were observed on the subject site.
- Pole-mounted electrical transformers were observed in the eastern portion of the subject site near the subject site boundary. The transformer casings displayed no visual evidence of leakage and the ground surface below the transformers displayed no evidence of discoloration. Based on Krazan's observations, the Pacific Gas & Electric (PG&E) Company is the owner of the transformers. The transformers were not labeled as to their polychlorinated biphenyl (PCB) status. Based on the visual absence of apparent unauthorized releases of insulating fluids from the on-site transformers at the time of Krazan's site reconnaissance, the on-site transformers are not currently anticipated to pose an adverse impact to the subject site. However, in the event of a future release/leak of insulating fluids from the on-site transformers, PG&E should be contacted regarding the testing of the transformers for PCB fluids or for their removal/replacement.
- No high-voltage, tower-mounted electrical transmission lines were observed on or within 100 feet of the subject site.

4.2 Utilities

Based on Krazan's research, the following Table III summarizes companies/municipalities that currently provide utility services to the subject site:

TABLE III
Municipal Service / Utility Providers

Service / Utility	Provider
Electricity	Pacific Gas & Electric (PG&E)
Natural Gas	PG&E
Potable Water	City of American Canyon
Sanitary Sewer	City of American Canyon

Water / Wells

The municipal potable water purveyor for the subject site is the City of American Canyon. The City of American Canyon's water quality monitoring is an on-going program with water samples obtained on a regular basis. It is the responsibility of the City of American Canyon to provide customers with potable water in compliance with the California State Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public. The City of American Canyon's 2018 Water Quality report posted on the City of American Canyon's website indicates that water provided by the City of American Canyon is in compliance with the California State MCLs for primary drinking water.

Records on file with Napa County Environmental Health Services Department (NCEHSD) indicate that a water well located on subject site parcel 058-362-016 was properly destroyed in May/June 2004. Additionally, Krazan's review of historical aerial photographs indicates that a structure was located within the southern portion of subject site parcel 058-362-021 circa 1952. A domestic water well was possibly associated with the former on-site structure. If a water well is identified during the planned redevelopment of the subject site, it should be properly destroyed in accordance with State and local guidelines.

Sewer / Septic Systems

The municipal sewer service provider to the subject site is the City of American Canyon. Krazan's attempt to determine if sewer service has been provided to the subject site by the City of American Canyon Public Works Department proved unsuccessful, as no information was returned in response to Krazan's request. However, access ports associated with a municipal sewer main were observed in the eastern portion of the subject site parallel to Broadway Street suggesting that municipal sewer service is available.

Krazan's review of historical aerial photographs indicates that a structure was located within the central-western portion of the subject site circa 1952. A septic system was possibly associated with the former on-site structure. If a septic system is identified during the planned redevelopment of the subject site, it should be properly abandoned/closed or destroyed in accordance with State and local guidelines.

4.3 Adjacent Streets and Property Usage

The following Table IV summarizes the current adjacent roads and adjacent property uses observed during the site reconnaissance:

TABLE IV
Adjacent Streets and Property Use

Direction	Adjacent Street	Adjacent Property Use
North	None	Vacant land, beyond which is a restaurant Residence
South	None	City Recreation Area (tennis courts) Residence
East	Broadway Street	Mini-storage Facility Multi-tenant commercial (Napa Information Center/Church Facility/Restaurant Hotel Facility
West	None	Residence Vacant Lot City Recreation Area (tennis courts) Napa County Mosquito Abatement Facility

Based on the observed uses of the properties located immediately adjacent to the subject site, it is unlikely that significant quantities of hazardous materials are stored at the adjacent properties except for the Napa County Mosquito Abatement Facility located adjacent to the west of the subject site. Please refer to Section 6.4 of this report for a discussion of regulatory records for the Napa County Mosquito Abatement facility.

4.4 ASTM Non-Scope Considerations

According to ASTM E 1527-13, there may be environmental issues or conditions at the subject site that are outside the scope of the Phase I ESA practice (non-scope considerations). Some substances may be present at the subject site in quantities and under conditions that may lead to contamination of the subject site or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 U.S.C. §9601[14]). ASTM non-scope considerations are discussed below.

Asbestos-Containing Materials

Asbestos is a group of naturally occurring mineral fibers that have been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos has been used for a wide range of manufactured goods, mostly in building materials, vehicle brakes, and heat-resistant fabrics, packaging, gaskets, and coatings. When asbestos-containing materials (ACMs) are damaged or disturbed by repair, remodeling, or demolition activities, microscopic asbestos fibers may become airborne and can be inhaled into the lungs, where they can cause significant health problems.

No structures are located on the subject site. Therefore, ACMs are not considered an on-site environmental concern at this time.

Lead-Based Paint

Although lead-based paint (LBP) was banned in 1978, many buildings constructed prior to 1978 have paint that contains lead. Lead from paint, chips, and dust can pose serious health hazards if not addressed properly.

No structures are located on the subject site. Therefore, lead-based paint is not considered an on-site environmental concern at this time.

Mold and Moisture Intrusion

A class of fungi, molds have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments, and produce spores to reproduce, just as plants produce seeds. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common locations of mold growth. Building materials including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth. Moisture control is the key to mold control. Molds need both food and water to survive; since molds can digest most things, water is the factor that limits mold growth. The EPA recommends the following action to prevent the amplification of mold growth in buildings:

- Fix leaky plumbing and leaks in the building envelope as soon as possible.
- Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible.
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).
- Keep heating, ventilation, and air conditioning (HVAC) drip pans clean, flowing properly, and unobstructed.
- Vent moisture-generating appliances, such as dryers, to the outside where possible.
- Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible.
- Perform regular building/HVAC inspections and maintenance as scheduled.
- Clean and dry wet or damp spots within 48 hours.
- Do not let foundations stay wet. Provide drainage and slope the ground away from the foundation.

No structures are currently located on the subject site. Therefore, microbial growth and moisture intrusion are not considered an on-site environmental concern at this time.

Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. A radon survey was not included within the scope of this investigation; however, the State of California Department of Public Health (CDPH) maintains a statewide database of radon results in designated geographic areas. Radon detection devices are placed in homes throughout the study region to determine geographic regions with elevated radon concentrations. The U.S. EPA has set the safety standard for radon gas in homes to be 4.0 pico Curies per liter (pCi/L).

The US EPA has prepared a map to assist National, State and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action Limit of 4.0 pCi/L. It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Property in Zone 3, where average predicted radon levels are below 2.0 pCi/L. Therefore, the available data suggests that the potential for radon to adversely impact the subject site appears to be low.

Environmental Non-Compliance Issues

No obvious material environmental non-compliance issues were identified in connection with the subject site in the process of preparing this report.

Activity and Use Limitations

No environmental activity and use limitations were identified in connection with the subject site in the process of preparing this report.

Wetlands

As defined by the U.S. EPA and the Department of Army, Corps of Engineers, wetlands are "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." Jurisdictional wetlands are regulated under Section 404 of the Clean

Water Act (1972, 1977, and 1987, and also the 1985 and 1990 Farm Bills), and are important for protection of aquatic waterfowl and species, water purification, and flood control. According to current Corps of Engineers information, three basic criteria are currently used to define wetlands:

- Wetland hydrology - areas exhibiting surface or near-surface saturation or inundation at some point in time (greater than 12.5 percent of growing season defined on basis of frost-free days) during an average rainfall year.
- Hydrophilic vegetation - frequency of occurrence of wetland indicator plants (plant life growing in water, soil, or substrate that is periodically deficient in oxygen as a result of excessive water content).
- Hydric soil - landscape patterns identified by saturation, flooding, or ponding long enough during the growing season (generally seven days) which develop characteristic color changes in the upper part of the soil as a result of anaerobic conditions.

Based on Krazan's reconnaissance of the subject site, evidence was not apparent to suggest that the site contained a wetland. Furthermore, according to the U. S. Fish & Wildlife Service (USFWS) National Wetlands Inventory available via the USFWS Internet website, the subject site does not contain a designated wetland. Therefore, at this time, regulations pertaining to wetlands do not appear to impact the subject site.

5.0 USER-PROVIDED INFORMATION

A review of user-provided information was conducted in order to help identify pertinent information regarding potential environmental impacts associated with the subject site.

5.1 Environmental Liens/Activity and Use Limitations Report

An Environmental Lien/Activity and Use Limitations (EL/AUL) Report was completed by AFX Corp. Inc. (AFX) for the subject site on March 27, 2020. The AFX EL/AUL Report provides results from a search of available land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls. The subject site EL/AUL Report was reviewed to identify potential environmental liens, institutional controls (ICs), environmental land use controls (LUCs), environmental activity and use limitations (AULs), or declaration of environmental use restrictions (DEULs) which may have been filed against the subject site or exist in connection with the subject site as indicated by the subject site EL/AUL Report. Krazan's review of the EL/AUL Report indicated no liens, judgments, ICs, LUCs, AULs, or DEULs were found for the subject site according to the scope of work and limitations. Please refer to Appendix A for a copy of the AFX EL/AUL report.

5.2 Title Report

A Preliminary Title Report (PTR) dated June 30, 2020, prepared for the subject site by Fidelity National Title Company, was provided to Krazan by Highridge Costa Development Company, Krazan's client and the Phase I ESA user. The subject site PTR was reviewed to identify potential environmental deed restrictions, environmental liens, or environmental activity and use limitations (AULs) which may have occurred on or exist in connection with the subject site. Krazan's review of the PTR indicated no environmental deed restrictions, environmental liens or environmental AULs for the subject site. However, as quoted from the subject site PTR, "It is important to note that this Preliminary Title Report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land." Please refer to Appendix B for a copy of the PTR.

5.3 Phase I Environmental Site Assessment User Questionnaire

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiry* is not complete. The user is asked to provide information or knowledge of the following:

1. Environmental cleanup liens that are filed or recorded against the site.
2. Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry.
3. Specialized knowledge or experience of the person seeking to qualify for the LLPs.
4. Relationship of the purchase price to the fair market value of the *property* if it were not contaminated.
5. Commonly known or *reasonably ascertainable* information about the *property*.
6. The degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation.
7. The reason for preparation of this Phase I ESA.

On April 10, 2020, a completed Phase I ESA user questionnaire was received from Mr. Mohammad Mohanna with Highridge Costa Development Company, Krazan's client and the Phase I ESA user. Please refer to Appendix C for a copy of the completed Phase I ESA user questionnaire.

According to the questionnaire responses, Mr. Mohanna, to the best of his knowledge as the user of this Phase I ESA, was not aware of any environmental cleanup liens and activity or land use limitations which

have been filed or recorded against the subject site; and Mr. Mohanna has no specialized knowledge or experience of the prior nature of the business or chemical utilization on the subject site. Mr. Mohanna indicated that the subject site is vacant land which has had no past uses to his knowledge. Mr. Mohanna indicated that he did not have knowledge of the past or current presence of specific chemicals or hazardous materials, unauthorized spills or chemical releases or of any environmental cleanups in connection with the subject site. Mr. Mohanna indicated that he is not aware of any obvious indications pointing to the presence or likely presence of contamination of the subject property. Mr. Mohanna stated that the purchase price of the subject site reasonably reflects fair market value. Mr. Mohanna indicated that the reason for preparation of this Phase I ESA is related to a City of American Canyon development requirement.

6.0 SITE USAGE SURVEY

The property usage survey included assessing property history, and reviewing local, state, and federal regulatory agency records.

6.1 Site History

A review of historical aerial photographs, a USGS topographic quadrangle map, City of American Canyon Planning and Development Department records, and reasonably ascertainable cross-reference directories, a search for Sanborn historical fire insurance maps (HFIMs), and a Phase I ESA interview were utilized to assess the history of the subject site.

Previous Environmental Assessment

No previous environmental assessments of the subject site were provided to Krazan for review during the course of this assessment.

Aerial Photograph Interpretation

Historical aerial photographs dated 1937, 1947, 1952, 1958, 1963, 1968, 1974, 1982, 1993, 2002, 2004, 2012, and 2018 were reviewed to assess the history of the subject site. These photographs were obtained from Environmental Data Resources, Inc. (EDR) and via the internet at Google Earth™. The aerial photograph summary is provided in the following Table V. Please refer to Appendix D for a copy of the historical aerial photographs.

TABLE V
Summary of Aerial Photograph Review

Year/Scale	Site Use	Site and Adjacent Property Observation
1937 1" = 500'	Vacant Land	The subject site appears to be vacant land with no visible on-site structures. The western edge of the subject site appears to be irrigated land which is possibly cultivated. The northern, southern and western adjacent properties appear to be vacant land, irrigated pasture and /or cultivated land. Broadway Street is visible adjacent to the east of the subject site, beyond which are a rural residence and agricultural land.
1947 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1937 aerial photograph except: 1) the majority of the subject site appears to be utilized for agricultural purposes, and 2) the northern, southern, and western adjacent properties appear to be cultivated.
1952 1" = 500'	Structure/ Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1947 aerial photograph except: 1) the central-western portion of the subject site (central-southern portion of parcel 058-362-021) appears to be occupied by a structure, and 2) the existing dwellings are visible adjacent to the south of the subject site and adjacent to the west of the northern portion of the subject site.
1958 1" = 500'	Structure/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1952 aerial photograph except the subject site does not appear to be cultivated and a residential subdivision has been developed to the west of the subject site.
1963 1" = 500'	Structures(3)/ Vacant Land	The central portion of the subject site appears to be occupied by three structures, including: 1) a larger structure in the location of the structure previously noted on the 1958 aerial photograph or a replacement of that structure with a larger one (central-southern portion of parcel 058-362-021), and 2) two structures in the northern portion of subject site parcel 058-362-016, as well as pavement surrounding the structures. The building and pavement configuration noted in the 1963 aerial photograph is consistent with the area containing building foundations and pavement remnants observed during Krazan's site reconnaissance. Conditions on the adjacent properties appear relatively similar to those noted in the 1958 aerial photograph.
1968 1" = 500'	Structures(3)/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1963 aerial photograph except: 1) the structure located in the central-northern portion of parcel 058-362-021 appears to be two adjacent or interconnected buildings, and 2) the smaller structure previously noted in the northern portion of subject site parcel 058-362-016 is no longer visible.
1974 1" = 500'	Structures(3)/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1968 aerial photograph.
1982 1" = 500'	Structures(3)/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1974 aerial photograph.

TABLE V (continued)
Summary of Aerial Photograph Review

1993 1" = 500'	Structures(3)/ Vacant Land	Conditions on the subject site appear relatively similar to those noted in the 1982 aerial photograph; however, the quality and resolution of the 1993 aerial photograph are poor. Conditions on the adjacent properties appear relatively similar to those noted in the 1982 aerial photograph except the eastern adjacent property appears to be occupied by the existing mini-storage facility and vacant land.
2002 1" = 500'	Structure(1)/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1993 aerial photograph except: 1) the structures previously noted in the central-southern portion of subject site parcel 058-362-021 are no longer present, although foundations and/or pavement are visible, 2) the existing mosquito abatement facility has been developed adjacent to the south and west of the subject site, and 3) the existing multi-tenant commercial building has been developed on the eastern adjacent property.
2004 1" = 500'	Structure(1)/ Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 2002 aerial photograph except the existing hotel facility is visible adjacent to the east and northeast of the subject site.
2012 1" = 500'	Vacant Land	The subject site appears to be vacant land with no visible on-site structures, although former building foundations and/or pavement are visible in the central-western portion of the subject site. Conditions on the adjacent properties appear relatively similar to those noted in the 2004 aerial photograph.
2018 1" = 500'	Vacant Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 2012 aerial photograph.

USGS Topographic Quadrangle Map

Krazan's review of the USGS, 7.5-minute, Cuttings Wharf, California topographic quadrangle map dated 1949, photorevised 1968, indicates that the central-western portion of the subject site was occupied by two structures by 1968. The remainder of the subject site is depicted as vacant land in 1949 and 1968. Refer to Figure No. 3, Topographic Map, for reference.

City of American Canyon Community Development Department – Building Division

On March 25, 2020, the City of American Canyon Community Development Department – Building Division (CACBD) was contacted to obtain potential building permit records for the subject site addresses of 3751 and 3787 Broadway Street and/or for the subject site APNs of 058-362-005, -016 and -021. According to Ms. Taresa Geilfuss with City of American Canyon Building Division, no building permits are on file with the CACBD for the referenced subject site APNs/addresses. Therefore, no permits for items such as underground storage tanks, septic systems, building demolition, or previous structures/features are on file with the City of American Canyon Building Division for the subject site.

City Directories

Krazan contracted with EDR to provide a review of available cross-reference directories dated 1927 through 2017 for the subject site addresses of 3751 and 3787 Broadway Street, and for any other odd Broadway Street addresses in the 3751 to 3787 address range, utilizing approximately five-year intervals. No listings were noted for any other odd Broadway Street addresses in the 3751 to 3787 address range. A summary of cross-reference directory information for the 3751 and 3787 Broadway Street addresses is presented in the following Table VI. Please refer to Appendix E for a copy of the EDR City Directory Report.

TABLE VI
Cross-Reference Directory Summary

Address	Owner/Occupant	Years
Subject Site		
3751 Broadway Street	Address Not Listed	1927 to 1959
	A&A Metal Products	1965
	American Canyon County Water District	1970 to 1984
	Vacant	1988
	Address Not Listed	1992 to 2000
	Napa County Mosquito Abatement District	2005
	Address Not Listed	2010, 2014, 2017
3787 Broadway Street	Address Not Listed	1927 to 1959
	Raymond Thompson (Residential Listing)	1965
	A&A Metal Products	1970
	Vacant	1974
	Joe O'Banion -trucking	1979
	O'Banion Enterprises – Firewood Division	1984
	Robert Cook (Residential Listing)	1988
	Address Not Listed	1992 to 2017

Krazan's review of cross-reference directories indicates that the subject site addresses were: 1) not listed in any of the directories reviewed between 1927 and 1959, 2) occupied by A&A Metal Products in 1965 and 1970, 3) occupied by O'Banion trucking and firewood operations in 1979 and 1984, 4) occupied by American Canyon County Water District from at least 1970 to at least 1984, and 5) occupied by Napa County Mosquito Abatement District in 2005, in addition to occasional residential listings. Information obtained from review of cross-reference directories is consistent with that obtained from other sources during the course of this assessment. Potential environmental concerns associated with the historical occupants of the subject site are discussed in Section 8.0 of this report.

Sanborn Historical Fire Insurance Maps

Krazan reviews HFIMs to evaluate prior land use of the subject site and the adjacent properties. HFIMs typically exist for cities with populations of 2,000 or more, the coverage dependent on the location of the subject site within the city limits. Krazan contracted with EDR to provide copies of available HFIMs for the subject site and the adjacent properties as far back as 1867. EDR's search of HFIMs revealed no coverage for the subject site and the adjacent properties. Please refer to Appendix F for a copy of the EDR HFIM *No Maps Available* report.

6.2 Interviews

Krazan conducts interviews with the owner of the subject site, a key site manager, subject site occupants, and/or the previous owners/occupants of the subject site. The interviews are designed to provide pertinent information regarding potential environmental impacts associated with the subject site.

Subject Site Owner's Representative – An interview was conducted with Mr. Bruce Peters, a representative of D'Ambrosio Brothers Investment Company, the owner of the subject site, via his completion of an environmental questionnaire. According to questionnaire responses, Mr. Peters indicated that he has been familiar with the subject site for the past 20 years. Mr. Peters indicated that the subject site is currently vacant land which was previously occupied by a small residence. Mr. Peters indicated that he has no concerns about adjacent property uses except for the mosquito abatement district office; however, Mr. Peters did not indicate the reason for his concern.

According to Mr. Peters, to the best of his knowledge, no use, storage, or disposal of hazardous materials; no existing or former ASTs or USTs; no hazardous materials spills, no environmental cleanups, no on-site treatment and/or discharge of waste; no environmental liens, AULs, engineering or institutional controls, no on-site leach fields, dry wells, sumps, or disposal ponds; no buried materials; no monitoring, domestic, or irrigation wells; or any items of environmental concern are associated with the subject site. Mr. Peters indicated that he is not aware of any obvious indications pointing to the presence or likely presence of contamination of the subject property. Mr. Peters indicated that the reason for preparation of this Phase I ESA is related to a proposed property purchase sale. Mr. Peters indicated that the purchase price of the subject site reasonably reflects fair market value. Please refer to Appendix G for a copy of the environmental owner questionnaire completed by Mr. Peters.

Previous Subject Site Owners/Occupants – An interview with a previous owner/occupant of the subject site was not reasonably ascertainable. Consequently, information regarding the history and historical uses of the subject site obtained from an interview of a previous owner and/or occupant constitutes a data gap.

6.3 Agricultural Chemicals

Review of historical aerial photographs indicates that a small portion of the subject site may have been used for agricultural purposes in 1937, the majority of the subject site was utilized for agricultural purposes in 1947, and no agricultural use of the subject site was noted from at least 1958 to the present. Although the potential exists that environmentally persistent pesticides/herbicides were historically applied to crops grown on the subject site circa 1940s; 1) no structures were noted on historical aerial photographs of the subject site taken in 1937 and in 1947, and impacts from agricultural chemicals are most often identified in association with chemical mixing and storage areas (structures), 2) no material evidence of the use of environmentally persistent pesticides/herbicides was obtained during the course of this assessment, and 3) it is anticipated that any environmentally persistent pesticides/herbicides potentially located on site will be dislocated and diluted as a result of the grading and trenching operations which will be conducted in conjunction with the proposed redevelopment of the property. Consequently, given the above-referenced factors and Krazan's experience in the subject site vicinity which generally indicates that the potential is low for elevated concentrations of environmentally persistent pesticides/herbicides related to crop cultivation to exist in the near-surface soils of common agricultural ground at concentrations which would require regulatory action, despite the absence of specific data, the potential for elevated concentrations of environmentally persistent pesticides or herbicides to currently exist in the near-surface soils of the subject site at concentrations which would require regulatory action appears to be low.

6.4 Regulatory Agency Interface

A review of regulatory agency records was conducted to help determine if hazardous materials have been handled, stored, or generated on the subject site and/or the adjacent properties and businesses.

Regulatory records are reviewed based on the following criteria: 1) properties with known soils and/or groundwater releases considered to represent the potential for impact to the subject site that are located within 1,760 feet of the subject site for constituents of concern impacts or 528 feet of the subject site for petroleum hydrocarbon impacts; 2) properties that are adjacent or in proximity to the subject site included within the EDR regulatory database report or noted during the site reconnaissance to possibly handle, store, or generate hazardous materials. Applicable property records are discussed below.

Napa County Planning, Building & Environmental Services Department

The Napa County Planning, Building & Environmental Services Department (NCESD) is the lead regulatory agency or Certified Unified Program Agency (CUPA) for hazardous materials handling facilities located in Napa County. Krazan's April 9, 2020 review of the Napa County Environmental

Services Department Electronic Document Retrieval database, available via the Napa County website, indicated that no hazardous materials storage, hazardous waste generator, AST, UST, leaking UST (LUST), environmental cleanup site/site mitigation, and/or hazardous materials release incident records are on file with the NCESD for the current subject site APNs of 058-362-005, -016 and -021, or for the apparent historical subject site address of 3787 Broadway Street. Additionally, no LUST records are included in the NCESD database for a vicinity property located at 142 Wilson Way. However, hazardous materials records are on file with the Napa County Environmental Services Department for the apparent historical subject site address of 3751 Broadway Street which are discussed below.

Napa County Mosquito Abatement/ subject site
American Canyon City Water District
3751 Broadway Street

Records on file with the NCESD for the apparent historical subject site of 3751 Broadway Street variously refer to the occupant as American Canyon City Water District and Napa County Mosquito Abatement. Records included in the NCESD Electronic Document Retrieval database for the 3751 Broadway Street (aka Napa Vallejo Highway and Highway 29) address include the following:

A Unified Programs Inspection Report dated April 6, 1999 in which the facility name is American Canyon City Water District. No observations or corrective actions are specified on this report document which contains little information other than it is a routine inspection.

A Unified Programs Inspection Report dated April 22, 1999 in which the facility name is County of Napa Mosquito Abatement. No observations or corrective actions are specified on this report document which contains little information other than it is a routine inspection.

A permit application dated May 16, 2003 to advance soil borings for a geotechnical study related to building foundations. Napa County Mosquito Abatement is listed as the occupant and owner of the property.

A CUPA Inspection Report dated April 27, 2005 in which the facility name is Mosquito Abatement. The report indicates that Mosquito Abatement has been moved to 15 Melvin Road, its current location adjacent to the west of the subject site. The report, which includes some minor violations and recommendations, appears to be associated with the new Mosquito Abatement location at 15 Melvin Road and not the subject site.

A Stormwater Inspection Report dated April 27, 2005 in which the facility name is County of Napa Mosquito Abatement. No observations or corrective actions are specified on this report document which contains little information other than it is a routine inspection.

Please refer to Appendix H for a copy of the above-referenced records on file with the NCESD for the subject site.

Additionally, hazardous materials storage inventory records and/or information related to CUPA compliance evaluation inspections of one facility located adjacent to the subject site are discussed below.

Napa County Mosquito Abatement District adjacent to the west
15 Melvin Road

According to records on file with the NCESD, the Napa County Mosquito Abatement District (NCMAD) occupant of the 15 Melvin Road address maintains permits with the NCESD as a hazardous materials handler and as a small quantity hazardous waste generator. According to information on file with the NCESD and contained in the California Environmental Reporting System (CERS) database available via the CalEPA Regulated Site Portal at the CalEPA website, a HMBP was submitted for the NCMAD on April 10, 2018. Krazan's April 9, 2020 review of the CalEPA Regulated Site Portal database indicated that 21 chemicals are used/stored at this property in reportable quantity, including: 1) four lubricants (12-59 gallons each), 2) seven liquid mosquito control agents (60-119 gallons each), 3) four compressed gases (0-2599 cubic feet each), 4) Teknar SC (60-119 gallons), 5) methoprene (60-119 gallons), 6) BVA flushing oil (0-11 gallons), 7) BVA mosquito larvicide (600-1199 gallons), 8) bromadiolone (100-499 pounds), and 9) altosid pellets (500-999 pounds). Hazardous materials release response plan (HMRRP) and hazardous waste generator (HWG) compliance evaluation inspections of this facility conducted by the NCESD in January 2015 and in September 2018 revealed no violations were noted by the NCESD inspector. Krazan's review of records on file with the NCESD and those contained in the CERS database for this eastern adjacent property address revealed no evidence of a documented release of hazardous materials or hazardous waste to the subsurface.

Based upon information generally indicating that the Napa County Mosquito Abatement facility may have occupied a portion of the western area of the subject site for a limited time from approximately 1999 to 2005, a time frame in which a county agency likely would not be utilizing environmentally persistent pesticides, along with no regulatory records of releases of constituents of concern, there is no material evidence that this former facility represents a significant environmental concern in conjunction with the subject site.

State of California Regional Water Quality Control Board - Geotracker

Krazan's March 25, 2020 review of the State of California Regional Water Quality Control Board (RWQCB) Geotracker database available via the RWQCB Internet Website indicated that no cleanup sites including LUST sites, cleanup program sites, land disposal sites, or military sites are listed for the subject site, the adjacent properties, or properties located within the subject site vicinity. However, a State Water Resources Control Board record dated June 1, 1988 indicates that a 550-gallon unleaded gasoline UST was located at the subject site address of 3751 Broadway Street. The UST is listed as a steel tank with underground suction piping. The installation date of the UST is listed as 1983. This UST is also discussed in Section 8.0 of this report. Please refer to Appendix I for a copy of the State Water Resources Control Board UST document.

Three closed LUST sites are listed within approximately 800 feet of the subject site, and pertinent environmental risk factors for this release site as related to the subject site are summarized in the following Table VII:

TABLE VII
Proximate Geotracker Release Site Listings

Site Name/Address	Distance From Subject Site/ Groundwater Flow Direction	COCs / (Media Impacted)	Investigation Status (Potential to Impact Subject Site)
Palby's Restaurant	440 feet to the north-northeast (property boundary) 550 feet to the north-northeast (release location) /	Lead /	LUST – Closed
3860 Broadway Street	(Southeasterly) – Upgradient of subject site	(Soil Only Impact)	(Low)
Caltrans Route 29 Post Mile 1.13	690 feet to the south-southeast /	Gasoline, Diesel & Waste Oil /	LUST – Closed
3466 Broadway Street	(Southeasterly) – Downgradient of subject site	(Soil & Groundwater)	(Low)
ARCO Station	825 feet to the south-southeast /	Gasoline /	LUST - Closed
3462 Highway 29	(Southeasterly) – Downgradient of the subject site	(Soil & Groundwater)	(Low)

Based on Krazan's review of information contained in the RWQCB Geotracker database, coupled with information pertaining to site location and local hydrogeology, there is no evidence that any of the above-listed sites currently represent an environmental concern in connection with the subject site.

State of California Environmental Protection Agency

Krazan's March 25, 2020 review of the State of California Environmental Protection Agency (CalEPA) – Department of Toxic Substances Control (DTSC) Envirostor database available via the DTSC's Internet Website indicated that no records of cleanup sites including State response sites, voluntary cleanup sites, school cleanup sites, or military or school evaluation sites are listed for the subject site, the adjacent properties, or properties located within 500 feet of the subject site. Additionally, no Federal Superfund – National Priorities List (NPL) sites were determined to be located within a one-mile radius of the subject site.

American Canyon Fire Protection District

The American Canyon Fire Protection District (ACFPD) has jurisdiction for fire protection for the subject site and the immediate vicinity. On March 25, 2020, the American Canyon Fire Protection District was contacted regarding potential records of hazardous materials storage and hazardous materials release incidents for the apparent historical subject site addresses of 3751 and 3787 Broadway Street. According

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to Chief Glen Weeks of the ACFPD, records of hazardous materials storage and hazardous materials spill incidents are kept by the Napa County Environmental Services Department, the CUPA for Napa County. Therefore, records of hazardous/flammable releases or incidents were not reasonably ascertainable from the American Canyon Fire Protection District.

California Department of Conservation, California Geologic Energy Management Division

Krazan's April 9, 2020 review of the State of California Department of Conservation, California Geologic Energy Management Division (CalGEM) Online Mapping System (DOMS) indicated that no plugged and abandoned or producing oil wells are located on or adjacent to the subject site.

Local Area Tribal Records

No Indian reservations, USTs on Indian land, or LUSTs on Indian land were reported on the subject site, adjacent properties, or vicinity properties in the EDR-provided government database report.

6.5 Regulatory Agency Lists Review

Several agencies have published documents that list businesses or properties which have handled hazardous materials or waste or may have experienced site contamination. The lists consulted in the course of our assessment were compiled by EDR and Krazan and represent reasonably ascertainable current listings. Krazan did not verify the locations and distances of every property listed by EDR. Krazan verified the location and distances of the properties Krazan deemed as having the potential to adversely impact the subject site. The actual location of the listed properties may differ from the EDR listing. Refer to the following Table VIII for a summary of the listed properties considered to have the potential to impact the subject site located within the specified ASTM Search Radii. The actual distances of the listed properties (which are summarized below) are based on observations during Krazan's site reconnaissance. No EDR-listed unmapped (non-geocoded) sites were determined to be located on or adjacent to the subject site. Please refer to the Appendix J for a copy of the EDR Radius Map report.

**TABLE VIII
Listed Properties**

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL RESPONSE</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i>								
ENVIROSTOR	1.000		0	0	0	2	NR	2
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		3	2	0	NR	NR	5

**TABLE VIII (customized)
Listed Properties**

MAP FINDINGS SUMMARY								
Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	7	NR	NR	NR	8
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	1	0	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	3	NR	NR	NR	4
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		1	2	NR	NR	NR	3
CERS TANKS	0.250		0	2	NR	NR	NR	2
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

**TABLE VIII (customized)
Listed Properties**

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	5	NR	NR	NR	6
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

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**TABLE VIII (customized)
Listed Properties**

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		2	NR	NR	NR	NR	2
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	0	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
<u>EDR HIGH RISK HISTORICAL RECORDS</u>								
<i>EDR Exclusive Records</i>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals -		0	9	24	0	2	0	35

**TABLE VIII (customized)
Listed Properties**

MAP FINDINGS SUMMARY								
<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<p>NOTES:</p> <p>TP = Target Property</p> <p>NR = Not Requested at this Search Distance</p> <p>Sites may be listed in more than one database</p>								

The following facilities were listed for the apparent historical subject site addresses:

D'Ambrosio Brothers subject site
3787 Broadway

According to EDR, the 3787 Broadway address is listed in the California HAZNET and HWTS databases for the transportation and proper off-site disposal of 0.84 tons of asbestos-containing waste in 1995. The proper off-site disposal of hazardous waste without evidence of violations associated with the disposal does not constitute an environmental concern in connection with the subject site. Additionally, it should be noted that D'Ambrosio Brothers Investment Company is the current owner of the subject site indicating that 3787 Broadway is in fact a correct historical subject site address.

Maintenance Building subject site subject site
3751 Broadway

According to EDR, the apparent historical subject site address of 3751 Broadway Street is listed as a Historical UST site. Records on file with the Water Resources Control Board for a UST located at this address are discussed in Sections 6.4 and 8.0 of this report.

1X American Canyon County Water District subject site
3751 Broadway

According to EDR, the apparent historical subject site address of 3751 Broadway Street is listed in the California HAZNET and HWTS databases for the transportation and proper off-site disposal of hazardous wastes on several occasions between 1990 and 2003. The EDR listing of records associated with the proper off-site disposal of shop wastes without evidence of violations does not in itself represent an environmental concern. Hazardous materials records for this facility/address are on file with the NCESD. NCESD records were previously discussed in Section 6.4 of this report.

Hazardous Materials Migration in Soils and/or Groundwater

EDR-listed facilities are located adjacent to the subject site. According to the EDR database report, Napa County Mosquito Abatement (15 Melvin Road) is listed as CERS sites located within 75 feet of the subject site. However, during Krazan's site reconnaissance, this facility was observed to be located adjacent to the west of the subject site. Hazardous materials records for this facility are included in the CalEPA Regulated Site Portal database. CalEPA Regulated Site Portal database records for this facility were previously discussed in Section 6.4 of this report.

No sites with reported releases of hazardous materials to the subsurface were reported within the subject site vicinity. In general, potentially hazardous materials or petroleum products released from facilities located approximately hydraulically upgradient within the subject site vicinity, or in a hydraulically cross-gradient direction in proximity to the site, may have a reasonable potential of migrating to the subject site via groundwater flow. This opinion is based on the assumption that non-vaporous hazardous materials generally do not migrate large distances laterally within the soil, but rather tend to migrate with groundwater in the general direction of groundwater flow. However, the potential for migration of volatile hazardous materials may include movement within soils, groundwater flow or potentially omnidirectionally if present in a vaporous state.

Hazardous Materials Migration in Vapor

Hazardous materials or petroleum product vapors which may have the potential to migrate into the subsurface of the subject site may be caused by the release of vapors from contaminated soil or groundwater either on or in the vicinity of the subject site from current or historical uses of the subject site and/or adjacent or vicinity properties. Current or past land uses such as gasoline stations (using petroleum hydrocarbons), dry cleaning establishments (using chlorinated volatile organic compounds), former manufactured gas plant sites (using volatile and semi-volatile organic compounds), and former industrial sites such as those that had vapor degreasing or other parts-cleaning operations (using chlorinated volatile organic compounds) are of particular concern. Constituent of concern vapors are capable of migrating great distances omnidirectionally along subsurface conduits such as pipelines, utility lines, sewer and stormwater lines, and building foundations.

California Water Resources Control Board records indicate that a steel gasoline UST was installed on the subject site in 1983. However, no records associated with the installation, operation, or removal of a UST are on file with the CUPA for the 3751 Broadway Street subject site address. Consequently, the structural integrity of the UST is unknown over the period of time in which it was/has been located on the subject site. The reported presence of a gasoline UST of unknown structural integrity on site for an extended

period of time represents a potential vapor intrusion impact of concern. Please refer to Sections 8.0 of this report for a discussion of environmental concerns associated with the reported presence of an unregistered gasoline UST on the subject site.

Krazan's review of the remaining vicinity properties listed by EDR as release sites within the applicable search radii suggests that these properties do not represent a significant potential for vapor migration in conjunction with the subject site. The rationale supporting this opinion includes the following:

- None of the reported sites were in close proximity to the subject site.
- Relevant sites had undergone investigation and remediation sufficient to receive regulatory agency closure.
- Sites with reported releases of minor quantities of COCs or COCs of limited volatility impacting soil only were considered of minimal concern.
- The lateral migration of the COCs in groundwater is reported to be limited and COCs were not detected in groundwater samples collected downgradient of the release and several hundred feet upgradient of the subject site.
- Sites with reported releases of COCs including volatile organic compounds (VOCs) were either of sufficient distance or hydraulically down- or cross-gradient from the subject site such that they do not appear to represent a significant potential for vapor migration on the subject site.

No engineering control sites, sites with institutional controls, or sites with deed restrictions were listed for the subject site, adjacent sites or vicinity properties in the EDR Report.

7.0 DISCUSSION OF FINDINGS

TABLE IX
Summary of Conclusions

Apparent Evidence of RECs or PAOCs From:	Not Noted	Noted
Historical Uses		X
Current Uses	X	
Adjacent or Vicinity Property Uses	X	

Historical Uses

Evidence of recognized environmental conditions and potential areas of concern have been identified in connection with the historical uses of the subject site which are discussed in the Conclusions/Opinions section of this report.

Current Uses

Based on Krazan's site reconnaissance, contacts with local regulatory agencies, and an interview with the owner of the subject site, there is no evidence that recognized environmental conditions exist in connection with the current uses of the subject site. However, site development issues were identified in connection with the subject site which are discussed in the Conclusions/Opinions section of this report.

Adjacent or Vicinity Property Uses

Based on Krazan's field observations, review of the EDR government database report, and consultation with local regulatory agencies, there is no evidence that recognized environmental conditions exist in connection with the subject site from adjacent property uses.

7.1 Evaluation of Data Gaps/Data Failure

In accordance with ASTM E 1527-13 guidance, data gaps represent a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice. Data failure represents the failure to achieve the historical research objectives of this practice even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap.

The following is a summary of data gaps encountered in the process of preparing this report including an observation as to the presumed significance of that data gap to the conclusions of this assessment.

- Absence of Interview with Previous Property Owner/Occupant (Section 6.1)

A Phase I ESA interview with the previous owner/occupant of the subject site was not reasonably ascertainable. Consequently, information regarding the history and historical uses of the subject site obtained from an interview of a previous owner and/or occupant constitutes a data gap. Taken in consideration with the available information obtained in the course of preparing this report in conjunction with professional experience, there is no evidence to suggest that this data gap might alter the conclusions of this assessment. However, the contents of an interview with a previous property owner/occupant are unknown.

8.0 CONCLUSIONS/OPINIONS

We have conducted a Phase I ESA of the subject site in conformance with the scope and limitations of the ASTM E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* guidance documents. Any deviations from this practice were previously described in this report. During the course of this assessment, Krazan identified the following evidence of recognized environmental conditions (RECs), potential areas of concern (PAOCs) and site development issues in conjunction with the subject site.

RECs

- Although the current parcels which comprise the subject site are not associated with addresses in title company databases, available historical data and existing address range information indicate that the structures previously located on site were associated with addresses of 3751 and 3787 Broadway Street (the southern adjoining property is addressed as 3663/3665 Broadway Street and the northern adjoining property is addressed as 3845 Broadway Street). Structures were historically located in the northern portion of subject site parcel 058-362-016 and in an area adjoining this location in the southern portion of subject site parcel 058-362-021. Based on current address ranges, the structures previously located in 058-362-016 are presumed to have been associated with the 3751 Broadway Street address and those located in 058-362-021 to have been associated with 3787 Broadway Street. However, as indicated previously, the historical on-site structures were located in adjoining portions of these two parcels and may have shared one or both addresses at some point historically. Furthermore, Krazan's research has revealed a record dated June 1, 1988 contained in a historical California State Water Resources Control Board database which indicates that a 550-gallon unleaded gasoline underground storage tank (UST) was located at the apparent historical subject site address of 3751 Broadway Street. The 550-gallon gasoline UST is listed as a tar-wrapped steel tank with underground suction piping. The installation date of the gasoline UST is listed as 1983 at a "maintenance building" associated with the 3751 Broadway Street address in American Canyon.

Although records are included in the Napa County Environmental Services Department (NCESD) Electronic Document Retrieval database for the 3751 Broadway Street address, no records related to the installation or removal of an underground storage tank are included in the database for this address. Additionally, Mr. Bruce Peters, a representative of D'Ambrosio Brothers Investment Company, the owner of the subject site, indicated that he has been familiar with the subject site for the past 20 years and is unaware of the current or historical presence of a UST on the subject site. Consequently, no records pertaining to the installation, operation, or removal of the UST reportedly located at the apparent historical subject site address of 3751 Broadway Street were identified during the course of this assessment, and thus there is no documentation indicating that the 550-gallon gasoline UST has been removed from the subject site. Furthermore, if the UST was removed from the subject site, there is no record of standard UST closure activities such as subsurface sampling to document the condition of the subsurface at removal. Given the time frame in which the gasoline UST was reportedly installed (1983) and the above-referenced information contained in the State Water Resources Control Board database, it is possible that a steel tank and steel product distribution lines without corrosion protection are currently or were formerly located on the subject site and the condition/structural integrity of this tank and product distribution lines during the time of operation are unknown. Given the above-referenced considerations, the potential exists for an unauthorized release(s) of gasoline to have occurred as

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the result of the historical operation of this 550-gallon UST, distribution lines and fuel dispenser on site for an extended period of time circa 1983, and the presence or absence of the UST and the condition of the subsurface of the subject site proximate to this reported gasoline UST and related equipment is unknown.

PAOCs

- As alluded to previously, Krazan's review of historical aerial photographs indicates that a structure was present in the southern portion of the parcel 058-362-021/3787 Broadway Street location circa 1952, roughly 30 years prior to the reported installation of the above-referenced UST at the southern adjoining property in 1983. Mr. Peters, familiar with the subject site since approximately 1999, indicated that he was unaware of USTs being located at the subject site and, as indicated previously, no records of USTs for the subject site are on file with the local regulatory agencies. However, USTs on rural or agricultural properties historically have been exempt from requirements for registration with regulatory agencies. Krazan's experience with such properties has shown that it is not uncommon for property owners/operators to install USTs in agricultural settings for their convenience, especially in the vicinity of structures, which are undocumented and whose presence would remain unknown in spite of the standard data research conducted in the course of this Phase I ESA. It is therefore possible that subsurface features such as unregistered USTs may exist in the vicinity of the former on-site structures historically located in subject site parcel 058-362-021 which remain unknown based upon the absence of any regulatory, municipality, interview data, or other evidence indicating their presence or location. Consequently, despite an absence of data suggesting their presence, the presence or absence of USTs associated with subject site parcel 058-362-021 prior to knowledge of the current owner of the subject site is unknown.
- During Krazan's March 30, 2020 site reconnaissance, an elongated ridge of apparently mounded soil was observed in the central-western and central portions of the subject site (parcel 058-362-021). Although this ridge and the majority of the subject site was densely covered in grasses/weeds which were relatively tall in places, the ridge appeared to be approximately one to three feet above surrounding grade dependent upon location. The ridge of mounded soil appeared to extend from the western property boundary eastward for approximately 150 to 200 feet with a maximum width of approximately 25 feet. No odors, surface staining, stressed vegetation or other obvious evidence of the presence of hazardous materials were noted in association with the apparent soil mound; however, surface soils were not generally visible due to the density of vegetation present.

Mr. Bruce Peters, a representative of the owner of the subject site, indicated via his responses to an environmental questionnaire that he has no knowledge of the presence of imported soil on the subject site, and no information concerning the origin of this apparent soil mound was obtained during the course of this assessment. It is therefore possible that this soil mound/ridge contains imported soil of unknown/undocumented origin. Krazan's experience indicates that imported soil can be contaminated with agricultural chemicals or other hazardous materials, dependent upon the specific location from which the soil is derived, and that the risk of contamination is increased for illegally disposed soils. Consequently, the origin and composition of the soil contained within this on-site soil mound/ridge related to potential contaminants is unknown relative to future use in redevelopment of the property or for disposal purposes.

Site Development Issues

- Records on file with NCESD indicate that a water well located on subject site parcel 058-362-016 was properly destroyed in May/June 2004. However, Krazan's review of historical aerial photographs indicates that a structure was located within the southern portion of subject site parcel 058-362-21 circa 1952. A water well and/or septic system were possibly associated with the former on-site structures. If a water well or septic system are identified during the planned redevelopment of the subject site, they should be properly abandoned/closed or destroyed in accordance with State and local guidelines.

9.0 RELIANCE

This report was prepared solely for use by Client and should not be provided to any other person or entity without Krazan & Associates' prior written consent. No party other than Client may rely on this report without Krazan & Associates' express prior written consent. Reliance rights for third parties will only be in effect once requested by Client and authorized by Krazan & Associates with authorization granted by way of a Reliance Letter. The Reliance Letter will require that the relying party(ies) agree to be bound to the terms and conditions of the agreement between Client and Krazan & Associates as if originally issued to the relying party(ies), or as so stipulated in the Reliance Letter.

10.0 LIMITATIONS

The site reconnaissance and research of the subject site has been limited in scope. This type of assessment is undertaken with the calculated risk that the presence, full nature, and extent of contamination would not be revealed by visual observation alone. Although a thorough site reconnaissance was conducted in accordance with ASTM Guidelines and employing a professional standard of care, no warranty is given, either expressed or implied, that hazardous material contamination or buried structures, which would not have been disclosed through this investigation, do not exist at the subject site. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used.

The findings presented in this report were based upon field observations during a single property visit, review of available data, and discussions with local regulatory and advisory agencies. Observations describe only the conditions present at the time of this investigation. The data reviewed and observations made are limited to accessible areas and currently available records searched. Krazan cannot guarantee the completeness or accuracy of the regulatory agency records reviewed. Additionally, in evaluating the

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034-20013 American Canyon Apartment Property Phase I Report Draft.doc

property, Krazan has relied in good faith upon representations and information provided by individuals noted in the report with respect to present operations and existing property conditions, and the historical uses of the property. It must also be understood that changing circumstances in the property usage, proposed property usage, subject site zoning, and changes in the environmental status of the other nearby properties can alter the validity of conclusions and information contained in this report. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used.

This report is provided for the exclusive use of the client noted on the cover page and shall be subject to the terms and conditions in the applicable contract between the client and Krazan. Any third party use of this report, including use by Client's lender, shall also be subject to the terms and conditions governing the work in the contract between the client and Krazan. The unauthorized use of, reliance on, or release of the information contained in this report without the express written consent of Krazan is strictly prohibited and will be without risk or liability to Krazan.

Conclusions and recommendations contained in this report are based on the evaluation of information made available during the course of this assessment. It is not warranted that such data cannot be superseded by future environmental, legal, geotechnical or technical developments. Consequently, given the possibility for unanticipated hazardous conditions to exist on a subject site which may not have been discovered, this Phase I ESA is not intended as the basis for a buyer or developer of real property to waive their rights of recovery based upon environmental unknowns. Parties that choose to waive rights of recovery prior to site development do so at their own risk.

Parties who seek to rely upon Phase I Environmental Site Assessment reports dated more than 180 days prior to the date of reliance do so at their own risk. This limitation in reliance is based on the potential for physical changes at the site, changes in circumstances, technological and professional advances, and guidance related to the continued viability of Environmental Site Assessment reports, user's responsibilities, and requirements for updating of components of the inquiry as stated in the ASTM Standard E 1527-13.

11.0 QUALIFICATIONS

This Phase I ESA was conducted under the supervision or responsible charge of Krazan's undersigned environmental assessor with oversight from the undersigned environmental professional. The work was conducted in accordance with ASTM E 1527-13 guidance, generally accepted industry standards for

environmental due diligence in place at the time of the preparation of this report, and Krazan's quality-control policies.

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

DRAFT

William Vick, PhD, REA
Environmental Professional

DRAFT

Arthur C. Farkas, REA
Environmental Professional

WHV/ACF/mlt

REFERENCES

- Aerial photographs obtained from Environmental Data Resources, Inc. (EDR), Microsoft® Research Maps, and Google Earth™.
- AFX Corp, Inc., Environmental Lien/Activity Use Limitations Report.
- American Society for Testing and Materials (ASTM), *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment (ESA) Process*, ASTM Designation: E 1527-13.
- ASTM, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, ASTM Designation E 2600-10.
- City of American Canyon Community Development Department – Building Division.
- City of American Canyon Fire Department.
- City of American Canyon Public Works Department.
- EDR, Sanborn Fire Insurance Map *No Maps Available* Report.
- EDR, City Directory Report.
- EDR, Regulatory Database Report.
- Fidelity National Title Company, Preliminary Title Report.
- Mohanna, Mr. Mohannad, Highridge Costa Development Company, LLC, Phase I ESA User Questionnaire.
- Napa County Planning, Building & Environmental Services Department.
- Peters, Mr. Bruce, Representative of the Owner of the Subject Site, Phase I ESA Property Owner Questionnaire.
- State of California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) Maps Website: http://www.conservation.ca.gov/dog/maps/Pages/index_map.aspx
- State of California Department of Toxic Substances Control, Envirostor Website: <http://www.envirostor.dtsc.ca.gov/public>
- State of California Environmental Protection Agency (CalEPA), California Environmental Reporting System (CERS) Database, CalEPA Regulated Site Portal.
- State of California Regional Water Quality Control Board, Geotracker Website: <http://geotracker.swrcb.ca.gov>
- U.S. Environmental Protection Agency (EPA) *Map of Radon Zones*.

REFERENCES (continued)

U.S. Fish & Wildlife Service National Wetland Inventory *Wetlands Mapper*:
<http://www.fws.gov/wetlands/Data/Mapper.html>

U.S. Geological Survey, 7.5-minute Cuttings Wharf, California topographic quadrangle map, dated 1949, photorevised 1968.

GLOSSARY OF TERMS

Subject Site: The real property being investigated under this Phase I ESA.

Adjacent Properties: Properties which are contiguous with the subject site, or would be contiguous except for a street, road, or other public thoroughfare.

Subject Site Vicinity: Properties located within a 500-foot radius of the subject site.

Environmental Professional: A person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b). The EP may be an independent contractor or an employee of the user.

User: The party seeking to use Practice E 1527 to complete an environmental site assessment of the subject site. A user may include, without limitation, a potential purchaser of the subject site, a potential tenant of the subject site, an owner of the subject site, a lender, or a property manager.

Recognized Environmental Condition (REC): In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

Controlled Recognized Environmental Condition (CREC): A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). For example, if a leaking underground storage tank has been cleaned up to a commercial use standard, but does not meet unrestricted residential cleanup criteria, this would be considered a CREC. The “control” is represented by the restriction that the property use remain commercial. A condition considered by the environmental professional to be a CREC shall be listed in the findings section of the Phase I ESA report and as an REC in the conclusions section. A condition identified as a CREC does not imply that the environmental professional has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the required control that has been, or is intended to be, implemented.

Historical Recognized Environmental Condition (HREC): A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release an HREC, the environmental professional must determine whether the past release is an REC at the time the Phase I ESA is conducted (for example, if there has been change in the regulatory criteria). If the EP considers the past release to be an REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as an REC.

GLOSSARY OF TERMS (continued)

Potential Area of Concern (PAOC): A term adopted to provide an alternative designation to the REC and HREC for a range of environmental issues related to current subject site uses, historical subject site uses, or from adjacent and/or vicinity property uses. The PAOC is utilized to emphasize full disclosure and provide the User with conclusions and recommendations related to potential environmental issues in connection with the subject site based on Krazan's professional experience in cases where official documentation or other evidence may be absent in order to identify an REC or HREC, thereby aiding the User's considerations of environmental due diligence risk tolerance.

Migrate/migration: For the purposes of this practice, "migrate" and "migration" refer to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface. Vapor migration in the subsurface is described in ASTM E 2600-10 guidance; however, nothing in the E 1527-13 practice should be construed to require application of the E 2600-10 standard to achieve compliance with AAI.

De minimis condition: A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Condition determined to be *de minimis conditions* are not RECS or CRECs.

Data Gap: A lack of or inability to obtain information required by this practice despite good faith efforts by the Environmental Professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to the site reconnaissance and interviews.

Data Failure: A failure to achieve the historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap.

GLOSSARY OF TERMS (continued)

AAI	All Appropriate Inquiries	MTBE	Methyl Tertiary Butyl Ether
AC	Asphalt Concrete	MFR	Multi-Family Residential
ACM	Asbestos-Containing Materials	ND	Nondetectable
AOC	Area of Concern	NFA	No Further Action (letter)
APN	Assessor's Parcel Number	NPDES	National Pollution Discharge Elimination System
AST	Aboveground Storage Tank	NPL	National Priorities List
ASTM	American Society for Testing and Materials	O&M	Operations & Maintenance Plan
AS	Air Sparging	PAOC	Potential Area of Concern
AUL	Activity & Use Limitations	PCB	Polychlorinated Biphenyl
bgs	Below Ground Surface	PCC	Portland Cement Concrete
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes	PCE	Perchloroethylene
CERCLA	Comprehensive Environmental Response Compensation and Liability Act	PEC	Potential Environmental Concern (TS)
CESQG	Conditionally Exempt Small Quantity Generator	PGD	Polk Guide Directory
CFR	Code of Federal Regulations	PG&E	Pacific Gas & Electric
CMU	Concrete Masonry Unit	PHCs	Petroleum Hydrocarbon Constituents
COCs	Constituents of Concern	PID	Photoionization Detector
DEULs	Declaration of Environmental Use Restrictions	ppb	Parts Per Billion
DOGGR	Division of Oil, Gas & Geothermal Resources (CA)	ppm	Parts Per Million
DTSC	Department of Toxic Substances Control (CA)	PRG	Preliminary Remediation Goal
EC	Engineering Control	PRP	Potentially Responsible Party
EDR	Environmental Data Resources, Inc.	RAP	Remedial Action Plan
EP	Environmental Professional	RCRA	Resource Conservation and Recovery Act
EPA	United States Environmental Protection Agency	REC	Recognized Environmental Condition
ERP	Emergency Response Plan	RP	Responsible Party
ESA	Environmental Site Assessment	RWQCB	Regional Water Quality Control Board (CA)
ESL	Environmental Screening Level	SBA	Small Business Administration
FOIA	Freedom of Information Act	SFR	Single-Family Residential
GPR	Ground Penetrating Radar	SPCC	Spill Prevention Control and Countermeasure Plan
HCCD	Haines Criss-Cross Directory	SQG	Small Quantity Generator
HFIM	Historical Fire Insurance Map	SCE	Southern California Edison
HMBP	Hazardous Materials Business Plan	SVE	Soil Vapor Extraction
HREC	Historical Recognized Environmental Condition	SVOC	Semi-Volatile Organic Compound
HVAC	Heating, Ventilation, Air Conditioning	SWRCB	State Water Resources Control Board
IC	Institutional Control	TCE	Trichloroethylene
LBP	Lead-Based Paint	TPH	Total Petroleum Hydrocarbons
LLP	Landowner Liability Protection	TPH-D	Total Petroleum Hydrocarbons as Diesel
LQG	Large Quantity Generator	TPH-G	Total Petroleum Hydrocarbons as Gasoline
LUC	Land Use Control	TPH-MO	Total Petroleum Hydrocarbons as Motor Oil
LUST	Leaking Underground Storage Tank	TS	Transaction Screen
MCL	Maximum Contaminant Level	USGS	United States Geological Survey
µg/L	Micrograms Per Liter	USFWS	United States Fish & Wildlife Service
mg/kg	Milligrams Per Kilogram	UST	Underground Storage Tank
mg/L	Milligrams Per Liter	VEC	Vapor Encroachment Condition
MSDS	Material Safety Data Sheet	VES	Vapor Encroachment Screening
		VOCs	Volatile Organic Compounds



Google Earth

1000 ft

 = SUBJECT SITE BOUNDARY



VICINITY MAP AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: NTS	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>With Offices Serving the Western U. S.</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20113	Figure No. 1	

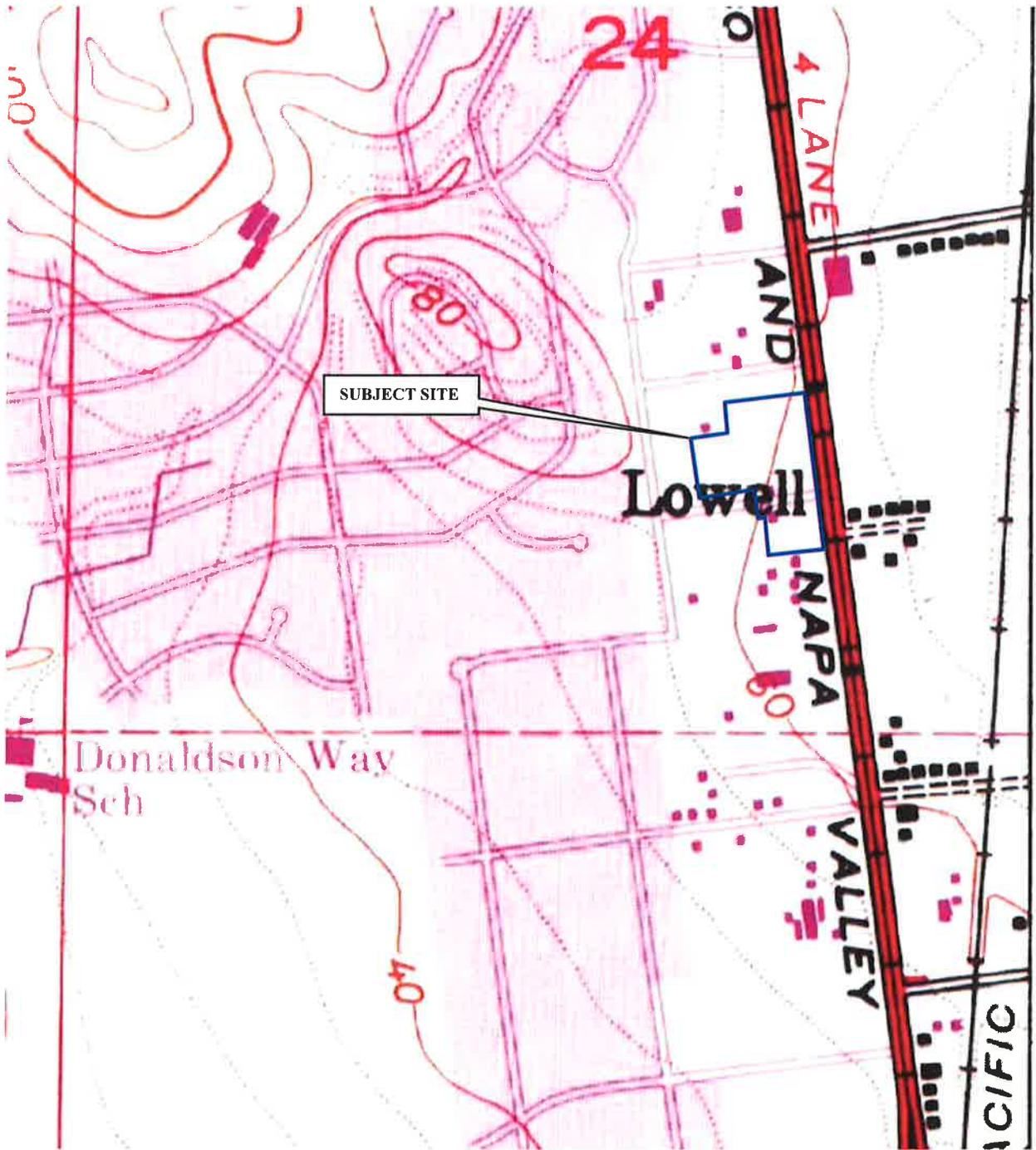


— = SUBJECT SITE BOUNDARY (APPROXIMATE)
 - - - = APN/PARCEL BOUNDARY (APPROXIMATE)

○ = APPARENT ELONGATED SOIL MOUND
 ■ = APPROXIMATE LOCATION OF HISTORICAL DEVELOPMENT (STRUCTURES AND PAVEMENT)
 ● = ELECTRIC METERS (2)
 ○ = POLE-MOUNTED ELECTRICAL TRANSFORMER



SITE MAP AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: NTS	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>With Offices Serving the Western U. S.</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20113	Figure No. 2	



7.5-MINUTE SERIES
 USGS TOPOGRAPHIC MAP
 CUTTINGS WHARF, CALIFORNIA
 DATED 1949
 PHOTOREVISED 1968

— = SUBJECT SITE BOUNDARY



TOPOGRAPHIC MAP AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: NTS	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>With Offices Serving the Western U. S.</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20113	Figure No. 3	



Photo 1: Northern-facing view of the southeastern portion of the subject site adjacent to Broadway Street (southeastern portion of 058-362-16).



Photo 2: Eastern-facing view of the southern portion of the subject site (southern portion of 058-362-16).

**AMERICAN CANYON APARTMENT
PROPERTY
BROADWAY STREET
APNS 058-362-005, -016 & -021
AMERICAN CANYON, CALIFORNIA**

Project No. 034-20013

Date: April 2020

Approved by: BV

 **Krazan**
SITE DEVELOPMENT ENGINEERS
Offices Serving the Western United States



Photo 3: Western-facing view of the central portion of the subject site (northern portion of 058-362-16).



Photo 4: Southern-facing view of the southwestern portion of the subject site (western portion of 058-362-16).

**AMERICAN CANYON APARTMENT
PROPERTY
BROADWAY STREET
APNS 058-362-005, -016 & -021
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Project No. 034-20013
Date: April 2020
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Photo 5: Northern-facing view of the central-western portion of the subject site (western portion of 058-362-21).



Photo 6: Eastern-facing view of the central-western and central portions of the subject site (central portion of 058-362-21).

**AMERICAN CANYON APARTMENT
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APNS 058-362-005, -016 & -021
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Photo 7: Southwestern-facing view of the central portion of the subject site (central portion of 058-362-21).



Photo 8: Southern-facing view of the central-eastern portion of the subject site (eastern portion of 058-362-21).

**AMERICAN CANYON APARTMENT
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Offices Serving the Western United States



Photo 9: Southern-facing view of the northern and central-eastern portions of the subject site (eastern portions of 058-362-05 and -21).



Photo 10: Western-facing view of the northern portion of the subject site (parcel 058-362-05).

**AMERICAN CANYON APARTMENT
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Photo 11: Eastern-facing view of the apparent former building foundation located in the central-southern portion of parcel 058-362-21).



Photo 12: Western-facing view of the apparent former building foundation located in the central-southern portion of parcel 058-362-21.

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Photo 13: Eastern-facing view of the apparent former pavement remnant located in the central and eastern portions of parcel 058-362-21.



Photo 14: View of the two electric meters located in the central portion of the subject site near the boundary of parcels 058-362-21 and -16.

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Photo 15: View of a pad and apparent utility vault located in the northwestern portion of parcel 058-362-16.



Photo 16: Northeastern-facing view of an apparent ridge of mounded soil located in the central-western portion of the subject site (western portion 058-362-21).

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Photo 17: View of an apparent municipal sewer line vent located in the southeastern corner of the subject site adjacent to Broadway Street.



Photo 18: View of Broadway Street and the multi-tenant commercial center located adjacent to the east of the subject site.

**AMERICAN CANYON APARTMENT
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Photo 19: View of the residence located adjacent to the south of the subject site.



Photo 20: View of the mosquito control district facility located adjacent to the west of the subject site.

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Photo 21: View of the City recreational facility located adjacent to the west of the subject site.



Photo 22: View of the vacant land located adjacent to the west of the subject site, beyond which are single-family homes.

**AMERICAN CANYON APARTMENT
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Photo 23: View of the residence located adjacent to the west of the subject site.



Photo 24: View of the vacant land located adjacent to the north of the subject site beyond which is a restaurant.

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Photo 2: Eastern-facing view of the southern portion of the subject site (southern portion of 058-362-16).

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Photo 3: Western-facing view of the central portion of the subject site (northern portion of 058-362-16).



Photo 4: Southern-facing view of the southwestern portion of the subject site (western portion of 058-362-16).

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Photo 7: Southwestern-facing view of the central portion of the subject site (central portion of 058-362-21).



Photo 8: Southern-facing view of the central-eastern portion of the subject site (eastern portion of 058-362-21).

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<p>AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA</p>	<p>Project No. 034-20013 Date: April 2020 Approved by: BV</p>	 <p>Krazan SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i></p>
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Photo 20: View of the mosquito control district facility located adjacent to the west of the subject site.

**AMERICAN CANYON APARTMENT
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BROADWAY STREET
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AMERICAN CANYON, CALIFORNIA**

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**AMERICAN CANYON APARTMENT
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<p>AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA</p>	<p>Project No. 034-20013 Date: April 2020 Approved by: BV</p>	 <p>Krazan SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i></p>
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Appendix A



ENVIRONMENTAL LIEN AND AUL REPORT

**Order Number:
03420013-1-BV**

**AFX Reference Number:
79-129658-47**

**Subject Property:
NO ADDRESS
AMERICAN CANYON, CA**

**Completed:
03/27/2020**

AFX RESEARCH, LLC

A Quarter-Century of Title Document Research Expertise

999 Monterey St. Suite 380, San Luis Obispo, CA 93401

(877) 848-5337 / www.afxllc.com

ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 2 of 3)

Order #: 03420013-1-BV | Reference #: 79-129658-47 | Completed: 03/27/2020

SOURCES SEARCHED

- Source 1: NAPA COUNTY RECORDER'S OFFICE
- Source 2: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
- Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

TARGET PROPERTY

Current Owner(s): DAMBROSIO BROTHERS INVESTMENT COMPANY
Street Address: NO ADDRESS
City, State: AMERICAN CANYON, CA
APN/Parcel/PIN: 058-362-005-000 County: NAPA
Legal Description: E1/2 OF THE N1/2 LOT 15 MCKNIGHT ACRES 4R/M52 TRA=91-34305

PROPERTY OWNERSHIP

Instrument: **GRANT DEED**

Date Recorded: 06/16/1989

Book/Page: 1663/107

Dated: 05/23/1989

Grantor(s): FIRST EXCHANGE CORPORATION

Grantee(s): DAMBROSIO BROTHERS INVESTMENT COMPANY

ENVIRONMENTAL LIENS

NO ENVIRONMENTAL LIENS FOUND FOR SUBJECT PROPERTY.

ACTIVITY AND USE LIMITATIONS (AUL)

NO AUL FOUND FOR SUBJECT PROPERTY.

LEASES AND MISCELLANEOUS INSTRUMENTS

NO LEASES OR MISCELLANEOUS INSTRUMENTS FOUND FOR SUBJECT PROPERTY.



AFX RESEARCH, LLC
999 Monterey St. Suite 380, San Luis Obispo, CA 93401
Ph: (877) 848-5337 Fax: (800) 201-0620
<http://www.afxllc.com>

ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 3 of 3)

Order #: 03420013-1-BV | Reference #: 79-129658-47 | Completed: 03/27/2020

THANK YOU FOR YOUR ORDER

For questions, please contact our office at 1-877-848-5337.

Order Number:

03420013-1-BV

AFX Reference Number:

79-129658-47

Our Environmental Lien and AUL report provides a summary of recorded information on a specific property from the time the current owner purchased the property, to present time. The report is intended to assist in the search for environmental liens filed in land title records. The report will verify property ownership and provide information on recorded environmental liens and/or Activity and Use Limitations that have been recorded from the time the current owner purchased the property, forward.

Our professional network of trained researchers follow established industry protocols and use client-supplied property information to complete this Environmental Lien and AUL report. The research is conducted at all appropriate government offices based on the location of the subject property. This would include City, County, State, Federal and Tribal offices as needed. The report includes:

- Current deed information (i.e. grantor, grantee, recording dates)
- Legal Description
- Environmental Lien information
- Activity and Use Limitation information
- Any Environmental Liens and/or documents referencing AULs that are listed within our summary report

DISCLAIMER

This report was prepared for the intended use of AFX Research, LLC (AFX) and client, exclusively. This report is not a guarantee of title, nor a commitment to insure, nor a policy of title insurance. No warranty, expressed or implied, is made whatsoever in connection with this report. AFX Research, LLC specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.



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ENVIRONMENTAL LIEN AND AUL REPORT

**Order Number:
03420013-2-BV**

**AFX Reference Number:
79-129659-47**

**Subject Property:
NO ADDRESS
AMERICAN CANYON, CA**

**Completed:
03/27/2020**

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ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 2 of 3)

Order #: 03420013-2-BV | Reference #: 79-129659-47 | Completed: 03/27/2020

SOURCES SEARCHED

Source 1: NAPA COUNTY RECORDER'S OFFICE
Source 2: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

TARGET PROPERTY

Current Owner(s): DAMBROSIO BROTHERS INVESTMENT COMPANY
Street Address: NO ADDRESS
City, State: AMERICAN CANYON, CA
APN/Parcel/PIN: 058-362-016-000 County: NAPA
Legal Description: APN 058-362-016-000 IN THE CITY OF AMERICAN CANYON

PROPERTY OWNERSHIP

Instrument: **GRANT DEED**

Date Recorded: 01/13/2006 Instrument: 2006-0001516
Dated: 12/08/2005
Grantor(s): CITY OF AMERICAN CANYON
Grantee(s): DAMBROSIO BROTHERS INVESTMENT COMPANY

ENVIRONMENTAL LIENS

NO ENVIRONMENTAL LIENS FOUND FOR SUBJECT PROPERTY.

ACTIVITY AND USE LIMITATIONS (AUL)

NO AUL FOUND FOR SUBJECT PROPERTY.

LEASES AND MISCELLANEOUS INSTRUMENTS

NO LEASES OR MISCELLANEOUS INSTRUMENTS FOUND FOR SUBJECT PROPERTY.



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ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 3 of 3)

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THANK YOU FOR YOUR ORDER

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Order Number:

03420013-2-BV

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Our professional network of trained researchers follow established industry protocols and use client-supplied property information to complete this Environmental Lien and AUL report. The research is conducted at all appropriate government offices based on the location of the subject property. This would include City, County, State, Federal and Tribal offices as needed. The report includes:

- Current deed information (i.e. grantor, grantee, recording dates)
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- Environmental Lien information
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ENVIRONMENTAL LIEN AND AUL REPORT

**Order Number:
03420013-3-BV**

**AFX Reference Number:
79-129660-47**

**Subject Property:
NO ADDRESS
AMERICAN CANYON, CA**

**Completed:
03/27/2020**

AFX RESEARCH, LLC

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ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 2 of 3)

Order #: 03420013-3-BV | Reference #: 79-129660-47 | Completed: 03/27/2020

SOURCES SEARCHED

Source 1: NAPA COUNTY RECORDER'S OFFICE
Source 2: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

TARGET PROPERTY

Current Owner(s): DAMBROSIO BROTHERS INVESTMENT COMPANY
Street Address: NO ADDRESS
City, State: AMERICAN CANYON, CA
APN/Parcel/PIN: 058-362-021-000 County: NAPA
Legal Description: APN 058-362-021-000 IN THE CITY OF AMERICAN CANYON

PROPERTY OWNERSHIP

Instrument: **GRANT DEED**

Date Recorded: 01/09/2012 Instrument: 2012-0000475
Dated: 12/14/2011
Grantor(s): CITY OF AMERICAN CANYON
Grantee(s): DAMBROSIO BROTHERS INVESTMENT COMPANY

ENVIRONMENTAL LIENS

NO ENVIRONMENTAL LIENS FOUND FOR SUBJECT PROPERTY.

ACTIVITY AND USE LIMITATIONS (AUL)

NO AUL FOUND FOR SUBJECT PROPERTY.

LEASES AND MISCELLANEOUS INSTRUMENTS

NO LEASES OR MISCELLANEOUS INSTRUMENTS FOUND FOR SUBJECT PROPERTY.



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ENVIRONMENTAL LIEN AND AUL REPORT

(pg. 3 of 3)

Order #: 03420013-3-BV | Reference #: 79-129660-47 | Completed: 03/27/2020

THANK YOU FOR YOUR ORDER

For questions, please contact our office at 1-877-848-5337.

Order Number:

03420013-3-BV

AFX Reference Number:

79-129660-47

Our Environmental Lien and AUL report provides a summary of recorded information on a specific property from the time the current owner purchased the property, to present time. The report is intended to assist in the search for environmental liens filed in land title records. The report will verify property ownership and provide information on recorded environmental liens and/or Activity and Use Limitations that have been recorded from the time the current owner purchased the property, forward.

Our professional network of trained researchers follow established industry protocols and use client-supplied property information to complete this Environmental Lien and AUL report. The research is conducted at all appropriate government offices based on the location of the subject property. This would include City, County, State, Federal and Tribal offices as needed. The report includes:

- Current deed information (i.e. grantor, grantee, recording dates)
- Legal Description
- Environmental Lien information
- Activity and Use Limitation information
- Any Environmental Liens and/or documents referencing AULs that are listed within our summary report

DISCLAIMER

This report was prepared for the intended use of AFX Research, LLC (AFX) and client, exclusively. This report is not a guarantee of title, nor a commitment to insure, nor a policy of title insurance. No warranty, expressed or implied, is made whatsoever in connection with this report. AFX Research, LLC specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.



AFX RESEARCH, LLC

999 Monterey St. Suite 380, San Luis Obispo, CA 93401

Ph: (877) 848-5337 Fax: (800) 201-0620

<http://www.afxllc.com>

Appendix B

 **Fidelity National Title Company**

PRELIMINARY REPORT

In response to the application for a policy of title insurance referenced herein, **Fidelity National Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Fidelity National Title Insurance Company, a Florida corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Fidelity National Title Insurance Company

By:



President

Attest:



Secretary

Countersigned By:



Authorized Officer or Agent



Visit Us on our Website: www.fntic.com



ISSUING OFFICE: 10969 Trade Center Drive, Suite 107, Rancho Cordova, CA 95670

**Another Prompt Delivery From Fidelity National Title Company Title Department
Where Local Experience And Expertise Make A Difference**

PRELIMINARY REPORT

Update A

Title Officer: Kevin Davis
Email: Kevin.Davis@titlegroup.fntg.com
Title No.: FSNX-TO1902007N-KD

TO: Fidelity National Title Group
4210 Riverwalk Parkway, Suite 100
Riverside, CA 92505
Attn: Chris Scurti
Ref. No.: 30039778

PROPERTY ADDRESS(ES): APNs: 058-362-005-000; 058-362-021-000 and 058-362-016-000 (Vacant Land),
American Canyon, CA

EFFECTIVE DATE: January 30, 2020 at 07:30 AM

The form of policy or policies of title insurance contemplated by this report is:

CLTA Standard Coverage Policy 1990 (04-08-14)

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee as to TRACT ONE; TRACT TWO, Parcel 1; and TRACT THREE, Parcel One

An Easement as to TRACT TWO, Parcel 2; and TRACT THREE, Parcels Two and Three

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS **VESTED IN:**

D'Ambrosio Brothers Investment Company, a limited partnership, as to TRACT ONE;

D'Ambrosio Brothers Investment Company, a corporation; and D'Ambrosio Brothers Investment Company, a limited partnership, as their interest appear of record, as to TRACT TWO; and

D'Ambrosio Brothers Investment Company, a California limited partnership, as to TRACT THREE.

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 058-362-005-000, 058-362-021-000 and 058-362-016-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF AMERICAN CANYON, COUNTY OF NAPA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

TRACT ONE: (APN: 058-362-005-000)

THE EAST HALF OF THE NORTH HALF OF LOT 15, AS SHOWN ON THAT CERTAIN MAP ENTITLED, "MAP OF MCKNIGHT ACRES, NAPA COUNTY, CALIFORNIA", FILED OCTOBER 14, 1948 IN BOOK 4 OF MAPS AT PAGES 52 AND 53, IN THE OFFICE OF THE COUNTY RECORDER OF SAID NAPA COUNTY.

TRACT TWO: (APN: 058-362-021-000)

PARCEL 1:

ALL OF THE REAL PROPERTY SITUATED IN THE CITY OF AMERICAN CANYON, COUNTY OF NAPA, STATE OF CALIFORNIA DESCRIBED IN THAT LOT LINE ADJUSTMENT GRANT DEED TO D'AMBROSIO BROTHERS CO., A CORPORATION RECORDED NOVEMBER 23, 2005 AT DOCUMENT NUMBER 2005-0048332 OFFICIAL RECORDS IN THE OFFICE OF THE COUNTY RECORDER NAPA COUNTY AND A PORTION OF REAL PROPERTY DESCRIBED IN THAT LOT LINE ADJUSTMENT GRANT DEED TO CITY OF AMERICAN CANYON, RECORDED JANUARY 13, 2006 AT DOCUMENT NUMBER 2006-0001515 OFFICIAL RECORDS NAPA COUNTY, CALIFORNIA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE NORTHEAST CORNER REAL PROPERTY DESCRIBED IN SAID DOCUMENT NUMBER 2005-0048332; THENCE ALONG THE EASTERN LINE OF LAST SAID REAL PROPERTY S 07° 29' 00" E, 203.00 FEET TO THE SOUTHERN LINE OF LAST SAID REAL PROPERTY; THENCE ALONG LAST SAID LINE S 82° 31' 00" W, 396.93 FEET; THENCE LEAVING LAST SAID LINE N 07° 29' 00" W, 203.00 FEET TO THE NORTHERN LINE OF THE REAL PROPERTY DESCRIBED IN SAID DOCUMENT NUMBER 2006-0001515; THENCE ALONG LAST SAID LINE N 82° 31' 00" E, 396.93 FEET TO THE POINT OF BEGINNING.

THE ABOVE BEING PURSUANT TO LOT LINE ADJUSTMENT AS DISCLOSED BY DEED RECORDED NOVEMBER 23, 2005, INSTRUMENT NO. 2005-0048332, OF OFFICIAL RECORDS.

PARCEL 2:

A 25 FOOT WIDE PUBLIC UTILITY AND ACCESS EASEMENT OVER, UPON AND ACROSS A PORTION OF THAT REAL PROPERTY SITUATED IN THE CITY OF AMERICAN CANYON, COUNTY OF NAPA, STATE OF CALIFORNIA DESCRIBED IN THAT LOT LINE ADJUSTMENT GRANT DEED TO CITY OF AMERICAN CANYON, RECORDED JANUARY 13, 2006 AT DOCUMENT NUMBER 2006-0001515 OFFICIAL RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF NAPA COUNTY, STATE OF CALIFORNIA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE SOUTHWEST CORNER OF SAID REAL PROPERTY; THENCE ALONG THE WESTERN LINE OF SAID REAL PROPERTY N 07° 29' 00" W, 25.00 FEET; THENCE LEAVING LAST SAID LINE PARALLEL WITH AND DISTANT 25.00 FEET NORTHERLY FROM THE SOUTHERN LINE OF SAID REAL PROPERTY N 82° 31' 00" E, 143.05 FEET; THENCE TO S 07° 29' 00" E, 25.00 FEET TO THE SOUTHERN LINE OF SAID REAL PROPERTY; THENCE ALONG LAST SAID LINE S 82° 31' 00" W, 143.05 FEET TO THE POINT OF BEGINNING.

TRACT THREE: (APN: 058-362-016-000)

PARCEL ONE:

EXHIBIT "A"
Legal Description
(continued)

PARCEL C, AS SHOWN UPON PARCEL MAP NO. 5512 FILED IN BOOK 24 OF MAPS, AT PAGE 17, NAPA COUNTY RECORDS.

PARCEL TWO:

A 5-FOOT DRAINAGE EASEMENT OVER THE NORTHERLY 5 FEET OF PARCEL A ON THE ABOVE REFERRED TO MAP.

PARCEL THREE:

A 2-FOOT DRAINAGE EASEMENT OVER THE SOUTHERLY 2 FEET OF PARCEL A ON THE ABOVE REFERRED TO MAP.

AT THE DATE HEREOF, EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2020-2021.
2. Intentionally deleted.
3. Intentionally deleted.
4. Taxes and assessments levied by the American Canyon Water District.
5. Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.
6. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.
7. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
8. Water rights, claims or title to water, whether or not disclosed by the public records.
9. Any easements and/or servitudes affecting easement parcels herein described.
10. If extended coverage title insurance will be requested, or if this report has been issued to facilitate a request for extended coverage title insurance, then following would also be exceptions to coverage:

(a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.

Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.

Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.

Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the land and not shown by the Public Records.

(a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.

Any lien or right to a lien for services, labor or material not shown by the Public Records.

EXCEPTIONS
(continued)

11. Waiver of any claims for damages to said property by reason of the location, construction, landscaping or maintenance of the freeway adjoining said property, as contained in the deed to the State of California, recorded January 21, 1948, [Book 282, Page 279, of Official Records](#).

12. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: March 3, 1950
[Recording No.: Book 327, Page 152, of Official Records](#)

Affects: Portion of Tract Two

13. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: May 8, 1950
[Recording No.: Book 334, Page 5, of Official Records](#)

Affects: Tract One

14. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: May 27, 1950
[Recording No.: Book 336, Page 33, of Official Records](#)

Affects: Portion of Tract Two

15. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Pipe line and facilities, together with ingress and egress
[Recording No.: Book 387, Page 232, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

EXCEPTIONS
(continued)

16. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Pipe line and facilities, together with ingress and egress
Recording No.: [Book 390, Page 356, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

17. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Pipe line and facilities, together with ingress and egress
Recording Date: October 20, 1952
Recording No.: [Book 399, Page 16, of Official Records](#)
Affects: Portion of Tract Two, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

18. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Pipe line and facilities, together with ingress and egress
Recording Date: October 20, 1952
Recording No.: [Book 399, Page 18, of Official Records](#)
Affects: Portion of Tract One, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

19. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Pipe line and facilities, together with ingress and egress
Recording Date: October 20, 1952
Recording No.: [Book 399, Page 20, of Official Records](#)
Affects: Portion of Tract Two, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

EXCEPTIONS
(continued)

20. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon County Water District
Purpose: Sewer pipe
Recording Date: June 7, 1965
Recording No.: [Book 724, Page 315, of Official Records](#)
Affects: Portion of Tract One, as set forth therein
21. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon Water District
Purpose: Sewer line
Recording Date: June 7, 1965
Recording No.: [Book 724, Page 317, of Official Records](#)
Affects: Portion of Tract Two, as set forth therein
22. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon County Water District
Purpose: Sewer line
Recording Date: June 7, 1965
Recording No.: [Book 724, Page 319, of Official Records](#)
Affects: Portion of Tract Two, as set forth therein
23. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon County Water District
Purpose: Sewer pipe
Recording No.: [Book 724, Page 321, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein
24. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon County Water District
Purpose: Sewer pipe
Recording No.: [Book 746, Page 925, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein
25. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
- Granted to: American Canyon County Water District
Purpose: Public water lines and facilities
Recording Date: August 24, 1987
Recording No.: 24660, [Book 1535, Page 451, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein

EXCEPTIONS
(continued)

26. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$105,000.00
Dated: April 20, 1989
Trustor/Grantor: First Exchange Corporation, a California corporation
Trustee: First American Title Insurance Company, a California corporation
Beneficiary: John A. McDonald, Trustee of the John A. McDonald Trust
Recording Date: May 10, 1989
Recording No.: 13440, Volume 1656, Page 104, of Official Records

Affects: Portion of Tract Two and other property

Matters contained in that certain document

Entitled: Agreement for Assumption of Note and Substitution of Liability
Dated: April 26, 1989
Executed by: D'Ambrosio Brothers Investment Co., a limited partnership, First Exchange Corporation, a California corporation and John A. Mc Donald, Trustee of The John A. Mc Donald Trust
Recording Date: May 10, 1989
Recording No.: 13443, Volume 1656, Page 109, of Official Records

Reference is hereby made to said document for full particulars.

27. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$40,000.00
Dated: April 20, 1989
Trustor/Grantor: First Exchange Corporation, a California corporation
Trustee: First American Title Insurance Company, a California corporation
Beneficiary: Joel Barrios and Dora Barrios, husband and wife as community property
Recording Date: May 10, 1989
Recording No.: 13441, Volume 1656, Page 106, of Official Records

Affects: Portion of Tract Two and other property

Matters contained in that certain document

Entitled: Agreement for Assumption of Note and Substitution of Liability
Dated: April 26, 1989
Executed by: D'Ambrosio Brothers Investment Co., a limited partnership, First Exchange Corporation, a California corporation and Joel Barrios and Dora Barrios
Recording Date: May 10, 1989
Recording No.: 13444, Volume 1656, Page 115, of Official Records

Reference is hereby made to said document for full particulars.

EXCEPTIONS
(continued)

28. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Utilities, poles, wires and facilities, together with ingress and egress
Recording Date: July 21, 1999
Recording No.: 21148, [Book 1671, Page 181, of Official Records](#)
Affects: Portion of Tract Three, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

29. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said tract/plat;

Purpose: Underground electrical for Parcel B
Affects: Tract Three, as shown on said map
Recording No.: Parcel Map No. 4278, filed September 1, 1989, [Book 17, Page 20](#), of Parcel Maps

30. A notice that said Land is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the redevelopment plan) as disclosed by a document

Recording Date: July 19, 1996
[Recording No.: 1996-017391, of Official Records](#)
Redevelopment Agency: City of American Canyon - The Highway 29 Corridor Redevelopment Project

31. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said tract/plat;

Purpose: A) waterlines; and
B) utilities
Affects: Tract Three, as shown on said map
Recording No.: Parcel Map No. 5512, filed October 2, 2003, [Book 24, Page 17](#), of Parcel Maps

The effect of an Easement Quitclaim Deed executed by the City of American Canyon, a municipal corporation, recorded September 24, 2007, [Instrument No. 2007-0030672, of Official Records](#).

The effect of an Easement Quitclaim Deed executed by the Napa County Mosquito Abatement District, recorded July 25, 2008, [Instrument No. 2008-0018893, of Official Records](#).

EXCEPTIONS
(continued)

32. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
Purpose: Utilities and facilities, together with ingress and egress
Recording Date: April 28, 2004
Recording No.: [2004-17062, of Official Records](#)
Affects: Tract Three, as set forth therein

Limitations on the use, by the owners of said Land, of the easement area as set forth in the easement document shown hereinabove.

Reference is hereby made to said document for full particulars.

33. Matters contained in that certain document

Entitled: Order Creating Napa River Watermaster Service Area
Dated: July 7, 2008
Executed by: California Department of Water Resources
Recording Date: July 24, 2008
Recording No.: [2008-0018850, of Official Records](#)

Reference is hereby made to said document for full particulars.

34. Certificate of limited partnership for D'Ambrosio Brothers Investment Company,

Recording Date: October 25, 1984,
Recording No.: [Book 1361, Page 667, of Official Records.](#)

Which discloses the general partners as than being:

- (a) John V. D'Ambrosio;
- (b) Nicholas J. D'Ambrosio;
- (c) Frank P. D'Ambrosio; and
- (d) Donald A. D'Ambrosio.

Additionally, Certificate of Limited Partnership form LP-1, recorded May 22, 1985, [Book 1389, Page 764, of Official Records](#), which discloses the same general partners therein.

EXCEPTIONS
(continued)

35. Before issuing its policy of title insurance, the Company will require the following for the below-named limited partnership:

Name: D'Ambrosio Brothers Investment Company, a limited partnership

- a. Certificate of Limited Partnership filed with the Secretary of State, in compliance with the provision of the California Revised Limited Partnership Act, Section 15611 et. seq., Corporations Code.
- b. Certified Copy of the Certificate of Limited Partnership certified by the Secretary of State filed with the County Recorder.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation

36. Before issuing its policy of title insurance, the Company will require evidence, satisfactory to the Company, that the vestee corporation named herein

- a. was duly incorporated on or before the date title was acquired by the said corporation;
- b. is now in good standing and authorized to do business in the state or country where the said corporation was formed; and
- c. has complied with the "doing business" laws of the State of California.

Affects: Tract Two

37. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:

Name of Corporation: D'Ambrosio Brothers Investment Company, a corporation

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent
- d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

EXCEPTIONS
(continued)

38. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

39. Matters which may be disclosed by an inspection and/or by a correct ALTA/NSPS Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

40. The Company will require that an Owner's Affidavit be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(ies): Vestees herein

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.

41. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

Affects: Tracts One & Three

42. The transaction contemplated in connection with this Report is subject to the review and approval of the Company's Corporate Underwriting Department. The Company reserves the right to add additional items or make further requirements after such review.

END OF EXCEPTIONS

NOTES

Note 1. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

Code Area: 005-007
Tax Identification No.: 058-362-005-000
Fiscal Year: 2019-2020
1st Installment: \$874.32
2nd Installment: \$874.32
Land: \$151,393.00

Affects: Tract One

Note 2. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

Code Area: 005-007
Tax Identification No.: 058-362-021-000
Fiscal Year: 2019-2020
1st Installment: \$2,247.57
2nd Installment: \$2,247.57
Land: \$398,760.00

Affects: Tract Two

Note 3. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

Code Area: 005-007
Tax Identification No.: 058-362-016-000
Fiscal Year: 2019-2020
1st Installment: \$4,454.46
2nd Installment: \$4,454.46
Land: \$796,290.00

Affects: Tract Three

Note 4. Note: The name(s) of the proposed insured(s) furnished with this application for title insurance is/are:

No names were furnished with the application. Please provide the name(s) of the buyers as soon as possible.

Note 5. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.

Note 6. Note: The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Title Insurance Rate.

Note 7. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

NOTES
(continued)

- Note 8.** The application for title insurance was placed by reference to only a street address or tax identification number. The proposed Insured must confirm that the legal description in this report covers the parcel(s) of Land requested to be insured. If the legal description is incorrect, the proposed Insured must notify the Company and/or the settlement company in order to prevent errors and to be certain that the legal description for the intended parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.
- Note 9.** Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.
- Note 10.** Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of a Company agent, an authorized employee of the insured lender, or by using Bancserv or other Company-approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.
- Note 11.** Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.
- Note 12.** Note: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.
- Note 13.** Due to the special requirements of SB 50 (California Public Resources Code Section 8560 et seq.), any transaction that includes the conveyance of title by an agency of the United States must be approved in advance by the Company's State Counsel, Regional Counsel, or one of their designees.

END OF NOTES



Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. **DO NOT** use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** **DO NOT** send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and **DO NOT** reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:

<http://www.fbi.gov>

Internet Crime Complaint Center:

<http://www.ic3.gov>

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Effective January 1, 2020

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law. We do share Personal Information among affiliates (other companies owned by FNF) to directly market to you. Please see "Choices with Your Information" to learn how to restrict that sharing.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

If you do not want FNF to share your information among our affiliates to directly market to you, you may send an "opt out" request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

For Nevada Residents: You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes; Use of Comments or Feedback

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice. We may use comments or feedback that you submit to us in any manner without notice or compensation to you.

Accessing and Correcting Information; Contact Us

If you have questions, would like to correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests to privacy@fnf.com, by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY - 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
(b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

**ATTACHMENT ONE
(CONTINUED)**

**CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE**

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

**ATTACHMENT ONE
(CONTINUED)**

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
 - (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II, [t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

**ATTACHMENT ONE
(CONTINUED)**

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
 - (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]
7. [Variable exceptions such as taxes, easements, CC&R's, etc., shown here.]

**ATTACHMENT ONE
(CONTINUED)**

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY - ASSESSMENTS PRIORITY (04-02-15)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies

CTC – Chicago Title Company
CLTC – Commonwealth Land Title Company
FNTC – Fidelity National Title Company
FNTCCA – Fidelity National Title Company of California
TICOR – Ticor Title Company of California
LTC – Lawyer's Title Company

Underwritten by FNF Underwriters

CTIC – Chicago Title Insurance Company
CLTIC – Commonwealth Land Title Insurance Company
FNTIC – Fidelity National Title Insurance Company
FNTIC – Fidelity National Title Insurance Company
CTIC – Chicago Title Insurance Company
CLTIC – Commonwealth Land Title Insurance Company

Available Discounts

CREDIT FOR PRELIMINARY TITLE REPORTS AND/OR COMMITMENTS ON SUBSEQUENT POLICIES (CTIC, FNTIC)

Where no major change in the title has occurred since the issuance of the original report or commitment, the order may be reopened within twelve (12) to thirty-six (36) months and all or a portion of the charge previously paid for the report or commitment may be credited on a subsequent policy charge.

DISASTER LOANS (CTIC, CLTIC, FNTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be thirty-two percent (32%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

Appendix C

Phase I ESA User Questionnaire
American Canyon Apartment Property
Broadway Street; APNs 058-362-005, -016 and -021
American Canyon, California 94503

Respondent Information:

Name: Mohannad H. Mohanna
Date: 4/10/2020

Company: Highridge Costa Development Company, LLC
Phone: 424-258-2912

Introduction

“In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfield Revitalization Act of 2001 (the ‘Brownfields Amendments’), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that ‘all appropriate inquiry’ is not completed”- American Society for Testing and Materials (ASTM) E1527-05 Appendix X3: User Questionnaire

1. Are you aware of any environmental cleanup liens against the subject site that are filed or recorded under federal, tribal, state, or local law?

No

2. Are you aware of any activity use limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the subject site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

The subject site is zoned Broadway Residential and is limited to residential uses to encourage a range of single and multi-family "missing middle" residential and residential-supportive uses.

3. As the user of the Phase I Environmental Site Assessment (ESA), do you have any specialized knowledge or experience related to the subject site or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject site or an adjacent property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No, there are no multi-family developments adjacent to the subject site.

4. Does the purchase price being paid for the subject site reasonably reflect the fair market value of the subject site? Yes No

A. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject site?

5. Are you aware of commonly known or reasonably ascertainable information about the subject site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

A. Do you know the past uses of the subject site? If so, briefly explain.

The subject site is vacant and has had no past uses.

B. Do you know of specific chemicals that are present or once were present at the subject site? If so, briefly explain.

No

C. Do you know of spills or other chemical releases that have taken place at the subject site? If so, briefly explain.

No

D. Do you know of any environmental cleanups that have taken place at the subject site? If so, briefly explain.

No

6. As the user of the Phase I ESA, based on your knowledge and experience related to the subject site, are there any obvious indicators that point to the presence or likely presence of contamination at the subject site?

No, we have had no indication that the subject site is contaminated.

7. What is the reason for preparation of this Phase I ESA? (Property purchase/sale; bank loan; proposed development; etc.)

To ensure the City of American Canyon that there are no contaminants on the subject site that could cause harm to future residents of the proposed development.

I, the user of this Phase I ESA (or authorized representative of the User), do hereby attest that I have carefully considered the questions herein and have presented answers to the best of my knowledge and ability based upon the Responsibilities of the User as required within ASTM E1527-05 guidance.

Name Mohannad H. Mohanna Date 4/10/2020
(Please Print)

Signature 

Appendix D



 = Subject Site Boundary (Approximate)



1937 AERIAL PHOTOGRAPH	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



— = Subject Site Boundary (Approximate)



1947 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



 = Subject Site Boundary (Approximate)



1952 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



— = Subject Site Boundary (Approximate)



1958 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



— = Subject Site Boundary (Approximate)



1963 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



— = Subject Site Boundary (Approximate)



1968 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



— = Subject Site Boundary (Approximate)



1974 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



 = Subject Site Boundary (Approximate)



1982 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: 1" = 500'	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: EDR	



 = Subject Site Boundary (Approximate)



1993 AERIAL PHOTOGRAPH	Scale: See Image	Date: April 2020	 Krazan SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: Goggle Earth	



 = Subject Site Boundary (Approximate)



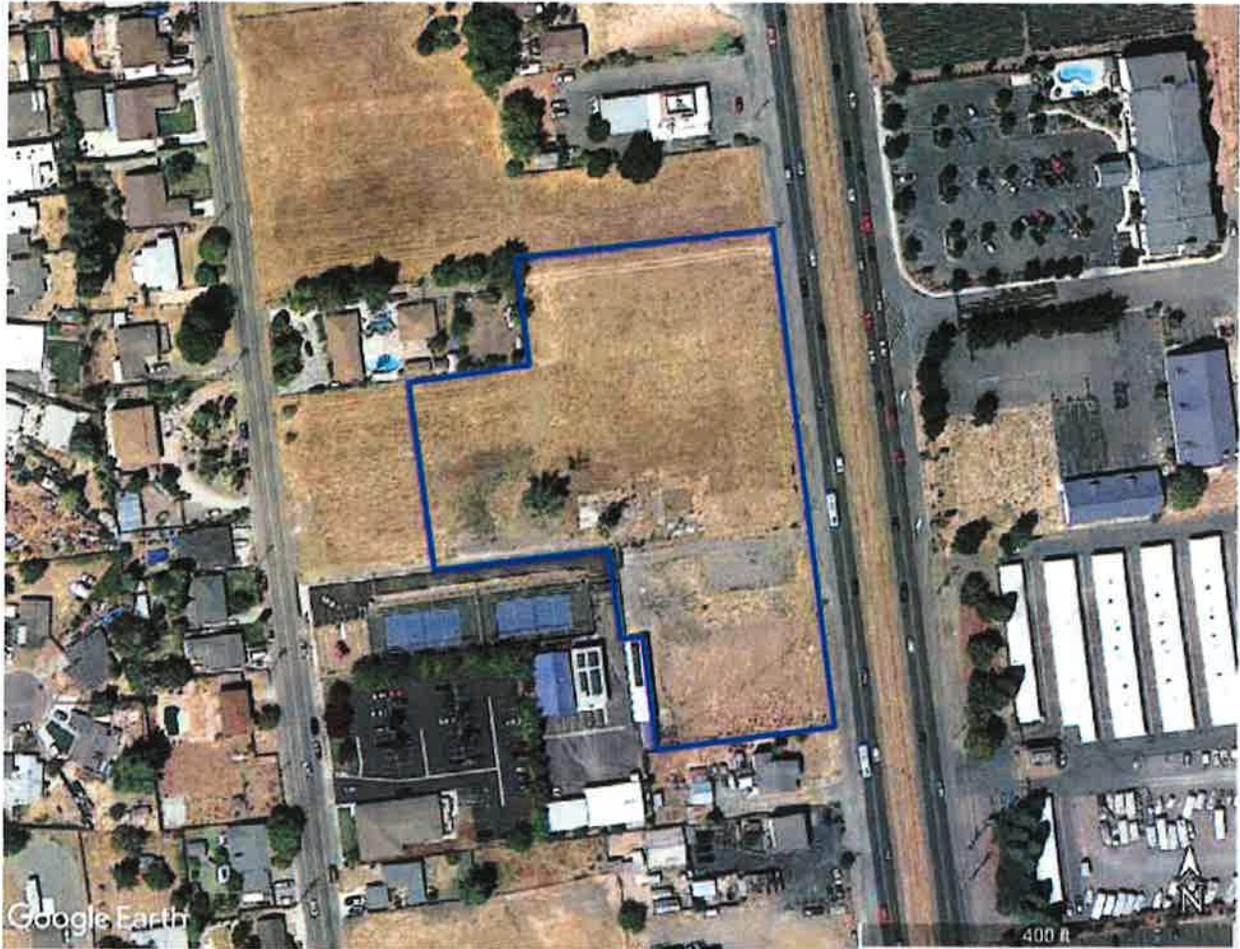
2002 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: See Image	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: Goggle Earth	



— = Subject Site Boundary (Approximate)



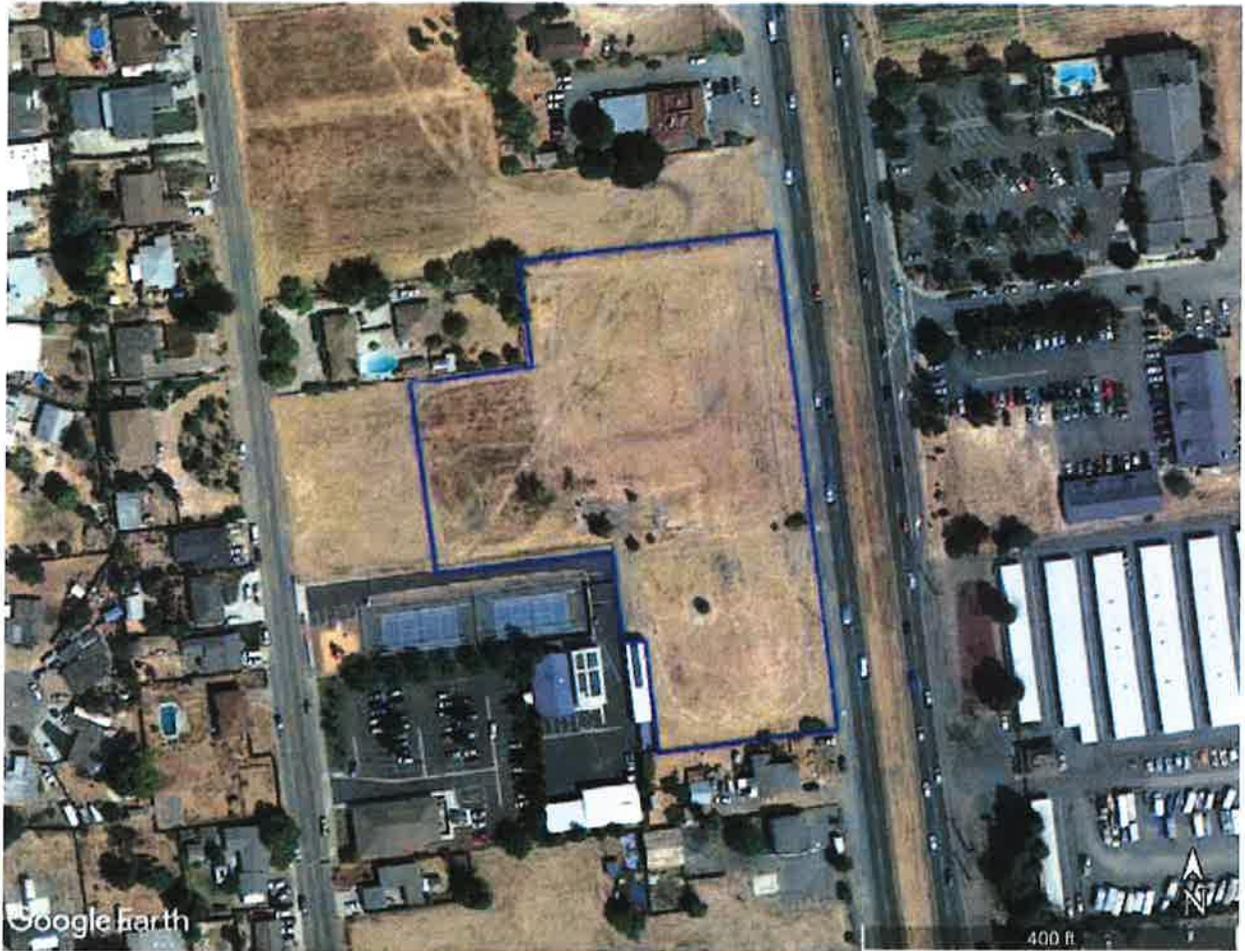
2004 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: See Image	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: Goggle Earth	



 = Subject Site Boundary (Approximate)



2012 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: See Image	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: Goggle Earth	



— = Subject Site Boundary (Approximate)



2018 AERIAL PHOTOGRAPH AMERICAN CANYON APARTMENT PROPERTY BROADWAY STREET APNS 058-362-005, -016 & -021 AMERICAN CANYON, CALIFORNIA	Scale: See Image	Date: April 2020	 SITE DEVELOPMENT ENGINEERS <i>Offices Serving the Western United States</i>
	Drawn By: BV	Approved by: BV	
	Project No. 034-20013	Source: Goggle Earth	

Appendix E

American Canyon Apartment Property

3751 Broadway Street
American Canyon, CA 94503

Inquiry Number: 6021708.1
March 26, 2020

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1988	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1984	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1979	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1974	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1970	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1965	<input checked="" type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1959	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1937	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1927	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO

EXECUTIVE SUMMARY

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
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FINDINGS

TARGET PROPERTY STREET

3751 Broadway Street
American Canyon, CA 94503

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
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BROADWAY ST

2017	pg A2	EDR Digital Archive	
2014	pg A7	EDR Digital Archive	
2010	pg A12	EDR Digital Archive	
2005	pg A16	EDR Digital Archive	
2000	pg A19	EDR Digital Archive	
1995	pg A20	EDR Digital Archive	
1992	pg A23	EDR Digital Archive	
1988	pg A24	POLK DIRECTORY CO	
1988	pg A25	POLK DIRECTORY CO	
1984	pg A26	POLK DIRECTORY CO	
1984	pg A27	POLK DIRECTORY CO	
1979	pg A28	POLK DIRECTORY CO	
1979	pg A29	POLK DIRECTORY CO	
1974	pg A30	POLK DIRECTORY CO	
1970	pg A31	POLK DIRECTORY CO	
1970	pg A32	POLK DIRECTORY CO	
1965	pg A33	POLK DIRECTORY CO	
1959	-	POLK DIRECTORY CO	Target and Adjoining not listed in Source
1937	-	POLK DIRECTORY CO	Street not listed in Source
1927	-	POLK DIRECTORY CO	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

BROADWAY ST 2017

2902 AKAU, CHARLES
ARAGON, KARMEN D
GOODHUE, STEVE A
WELLS, VINCE T

3000 ARMSTRONG, JIM E
BABER, EMMA J
BARNETT, TONY W
BETTY, MC C
BIDWELL, FOSTER K
BOYANICH, JOHN R
BROTHERS, MARY A
CARRIGER, DIANNA W
CAUCHI, ELLIS P
CERDA, CLARE A
CRISCI, JEFF T
DAVENPORT, HENRY E
DAVIS, DARLENE S
DONDERO, MERYCE M
EWING, STAN
FLORES, HENRY C
FOX, ANN C
FRANCO, JOSE L
GARDNER, JOHN
GOBLE, JEFFREY J
GRAYSON, KATHLEEN M
GRIGG, EDWARD J
HANSEN, EVELYN J
KENNEDY, CHARLES T
KERNS, DANN
KREMER, GREGORY E
KUHL, JAMES H
KUSTER, RICHARD L
LAMBE, MAURICE
LEACH, DEOGRACIAS G
LESLIE, ALEXANDER
MACKENZIE, PATSY A
MALICKI, MICHAEL L
MANNY, VERA A
MCCABE, PERRY T
MCCARDLE, LAURA M
MCMAHON, MARION A
MEJIA, GUILLERMIANA
MELENDRES, FIDEL
MILNE, JOHN S
MOGG, THOMAS J
MOLLET, JUDITH A
OBRIEN, KELLY R
PEAK, JAIME L
PEIL, PAMELA M
PHIPPEN, JOAN M

BROADWAY ST 2017 (Cont'd)

3000 POPKIN, JONATHAN
RAWDON, NANCY L
REOLA, CARLITO L
RICKER, LORRAINE M
RILEY, EDWARD C
RIOS, CARMEN A
RIVERA, REYNALDO S
ROBERTS, SONY A
RUSSELL, BILL C
SAEGESSER, NICHOLE S A
SARGENT, JUDITH A
SAVANO, MARLENE A
SILVA, KAY
SILVEIRA, STANLEY V
SITJAR, LEONISA T
SOUSA, GEORGE R
STANDRIDGE, GLENN
STATZA, DENNIS S
STEPHENS, LUCILLE M
STRATFORD, RICK A
STRAUB, PAUL L
THEODOR, HART R
TURNER, WILLIAM B
VICKREY, PEGGY M
VILLARINO, ANJELICA
WILLIAMS, ROGER C
WOLF, ROBERT E
3306 DONOHOE, TANNY
3312 CROW, RAY K
3330 ERICKSON, DENNIS R
3353 CHURCH, OPEN D
OPEN DOOR CHRISTIAN CHURCH
3417 A BRIGHT FUTURE
EYE CARE CENTER OF NAPA VALLEY
SUBWAY
UMPQUA BANK
VINTAGE BANK THE
3419 AMERICAN CANYON ORTHODONTICS
CANYON KAJUKENBO MARTIAL ARTS INSTIT
CRAVE RESTAURANT & CATERING
GOLDEN STATE LUMBER
NSS CAPITAL LLC
RUBADUB DOG BATH
YUMMY GARDEN
3421 29 OUTDOOR GEAR
WESTAMERICA BANK
3423 AMERICAN CANYON FAMILY RCN
HESS RH DEVELOPMENT
HUMPHREY, C
SERENITY DAY SPA & SALON

BROADWAY ST 2017 (Cont'd)

3425 THAI KITCHEN AMERICAN CANYON
3427 AMERICAN CANYON CHAMBER OF COMMERCE
BOLT STAFFING
DAVID R YORK CPA
LOS CANTAROS TAQUERIA
YORK, DAVID
3429 DAVID R YORK CPA
HOME INSTEAD SENIOR CARE
K J NAILS
RE MAX
STATE FARM INSURANCE
TIFFYS
3431 AMERICAN CANYON DENTAL CARE DR JU
AMERICAN CANYON FAMILY RESOURCE CENT
BAY AREA OSTEOPATHIC DOCTOR
CURVES
JULIA VILLA DDS
NEWMD URGENT CARE INC
SEAMS WHEN PIGS FLY
SECURITY ENFORCEMENT ALLIANCE
SUSAN C CISLO DO
3433 CANYON MED SPA
FARMERS INSURANCE
FARMERS INSURANCEDAVID COULOMBE
HANGER CLINIC PROSTHETICS & ORTHOTI
HOME INSTEAD SENIOR CARE
STUDIO 29 HAIR DESIGN
3436 GENERAL PLUMBING SUPPLY CO
3439 YOUR STYLE DECOR
3441 COST RITE FURNITURE
3448 AMERICAN CANYON CAR WASH
3456 NAVAJO RUG & UPHOLSTERY CLEANING CO
NAVAJO RUG CO
3462 AMPM
EMERGENCY LOCKSMITH
3464 RANERI & LONG ROOFING CO
3470 MARTINEZ, ELISABETH
3475 ACCESS ELECTRONIC SERVICES
3477 ACACIA CREMATION & BURIAL SOCIETY
ACACIA SOCIETY
HAIR WORKS SALON
3479 PRETECT TOUCH BY ROXZEN
3600 DOUBLETREE
HILTON
3631 BROADWAY LANDSCAPE MATERIALS
3635 MID CITY NURSERY
3665 PEREZ, LEOCADIO M
3700 AMERICAN CANYON MINI & RV STORAGE
3800 FAIRFIELD INN & SUITES NAPA AMERICAN
3845 CANYON CAFE

BROADWAY ST 2017 (Cont'd)

3853 MUFTAH, GHUZI
NOOR, HAMID

3860 ABBA IN ONE CARE SERVICES
CALIFORNIA DENTAL CARE
CROWN REALTY PMPJ
CROWN REALTY PROPERTY MANAGEMENT
FARMERS INSURANCE
R & D TRANSPORTATION SERVICES INC
VARGAS ENTERPRISE
WORLD FINANCE

3863 KERNS, CHERYL L

3885 FABBRI STATUARY

3915 AC FOOD & LIQUOR
BROADWAY MARKET

3919 ALL STAR HAIR SALON
FAMILY HAIR SALON
THAI MARKET

3921 LE PARIS ARTISAN & GOURMET CAFE

3927 SKY NAIL SALON

3945 TACOS MICHOACAN

4115 WILLIAMS, GEORGE A

4207 GRANTS THRIFT STORE & MORE

4209 HURST FIREWOOD & TREE SERVICE

4211 INFINITY CONNECTIONS

4215 LARRYS CUSTOM AUTO UPHOLSTERY

4225 LARRYS CUSTOM TRUCK TOPPERS
LARRYS TRADING POST

4381 A BRIGHT FUTURE
CITY OF AMERICAN CANYON
EAGLE VINES REALTY
EAGLE VINES REALTYBUSINESS CENTER
GUSTAVO PADILLA INSURANCE SERVICES
HAMATI BOOKKEEPING & TAX SERVICES
JEREMEY REYES LAW JUSTICE
PADILLA INS GUSTAVO SVC
STATE OF CALIFORNIA

5353 T KO IRON WORKS

5365 DOSHIER GREGSON INC

5405 PATIO HEATERS R US

5425 ALCAN PACKAGING CAPSULES OF CA

5431 SERVICEMASTER CLEAN

5555 GYPTECH
K & B LOGISTIC INC
MAETRIALOGIC FOUR
MATERIALOGIC
SCHOTKA CONSTRUCTION INC

5747 DIABLO TIMBER CORP

5757 PACIFIC COAST CUSTOMS

5759 PACIFIC AUTO SALVAGE INC

6240 LA STRADA

Target Street

Cross Street

Source

✓

-

EDR Digital Archive

BROADWAY ST 2017 (Cont'd)

6400 KJ MOVING SYSTEMS INC
6405 ALL METAL FABRICATION INC
ANDERSON, CLIFF

BROADWAY ST 2014

2902 AKAU, CHARLES
ARAGON, KARMEN D
CHRISTENSEN, SANDY B
GOODHUE, STEVE A
YOSHINO, KRISTA

3000 ANDRES, REBECCA B
ARMSTRONG, JAMES
BABER, EMMA J
BARNETT, TONY W
BEECHER, SUSAN F
BILLON, RONALD
BOGARIN, CARMEN A
BOWERS, GARY L
BRETBRUNNER, ROBERT W
BROTHERS, MARY A
CARLSON, LEROY A
CAROL, MARYANN A
CARRIGER, DIANNA W
CELONES, SERASIN D
CERDA, CLARE A
CRISCI, JEFF T
CZEJDO, LUCY N
DAVENPORT, HENRY E
DAVIS, WARREN C
DEAL, SANDRA B
DEDICATORIA, MILAGROS R
DONDERO, MERYCE M
EWING, STAN
FARRELL, MARLENE A
FRANCIS, DARLENE S
FRANCO, JOSE L
GARDNER, JOHN
GOUVEIA, BERNADETTE
HAMILTON, THOMAS
HANSEN, EVELYN J
HART, THEODORE R
HEIKKILA, MARK A
HOGENBOOM, MAURICE
JONATHAN POPKIN
KENNEDY, CHARLES T
LAS CASITAS NAPA MOBILE HOME PARK
LEACH, DEOGRACIAS G
LESLIE, ALEXANDER
LEVETT, ROY R
MALICKI, MICHAEL L
MALICKIE, LINDA
MCCARDLE, LAURA M
MCMAHON, MARION A
MEJIA, GUILLERMIANA
MELENDRES, FIDEL

BROADWAY ST 2014 (Cont'd)

3000 MOGG, THOMAS J
MOLLET, JUDITH A
MORRISON, PATRICIA J
ODELL, JAMES W
PARRISH, ELLIE
PATE, JEFFREY T
PECK, RONALD J
POWELL, JAMES
RICKER, ROBERT H
RILEY, EDWARD C
ROBERTS, SONY A
ROSENBAUM, ROBERT C
SARGENT, FRANCES B
SARGENT, FRANK G
SAVANO, MARLENE A
SILVA, KAY
SILVEIRA, STANLEY V
SITJAR, LEONISA T
SOUSA, GEORGE R
STANDRIDGE, GLENN
STEPHENS, LUCILLE M
STRATFORD, STEVEN G
THORET, WILLIAM L
TURNER, WILLIAM B
VILLALOBOS, CIRILO C
WOLF, ROBERT E
3306 DONOHOE, TANNY
3312 CROW, RAY K
3330 ERICKSON, DENNIS R
3353 CHURCH, OPEN D
OPEN DOOR CHRISTIAN CHURCH
3417 ALANTIC PACIFIC REALTY
ASHMUN & ASSOCIATES ATLANTIC PACIF
BELLA ULTIMATE TANNING SALON
CANYON PLAZA
EYE CARE CENTER OF NAPA VALLEY
SUBWAY SANDWICHES
UMPQUA BANK
VINTAGE BANK THE
3419 ACTIVE REHAB PHYSICAL THERAPY
ACTIVE REHAP PHYS THERAPY
AMERICAN CANYON ORTHODONTICS
CANYON KAJUKENBO MARTIAL ARTS INSTIT
CRAVE RESTAURANT & CATERING
GOLDEN STATE LUMBER
YUMMY GARDEN
3421 COUNTY OF NAPA
WESTAMERICA BANK
3423 HESS RH DEVELOPMENT
HUMPHREY, C

BROADWAY ST 2014 (Cont'd)

3423 SERENITY SALON & DAY SPA
3425 THAI KITCHEN AMERICAN CANYON
3427 AMERICAN CANYON CHAMBER OF COMMERCE
BOLT STAFFING INC
TAQUERIA ROSITA 2
YORK DAVID R CPA
YORK, DAVID
3429 FRINK-HUNTER, CHERIE
HAMMER MIKE INS AGT
K J NAILS
MIKE HAMMER STATE FARM INSURANCE A
REMAX GOLD REALTY
STATE FARM INSURANCE
3431 AMERICAN CANYON DENTAL CARE
AMERICAN CANYON FAMILY RCN
BAY AREA OSTEOPATHIC DOCTOR
E&A1 TOWING
ETHEVARRIA, JOHN M
EXCELCARE IMMEDIATE CARE CENTER
NEWMD URGENT CARE INC
SEAMS WHEN PIGS FLY
VILLA JULIA DDS
3433 1ST AMERICAN TITLE COMPANY OF NAPA
FARMERS INSURANCE GROUP
FARMERS INSURANCEDAVID COULOMBE
HANGER PROSTHETICS & ORTHOTICS
HOME INSTEAD SENIOR CARE
STUDIO 29 HAIR DESIGNS
3434 OCCUPANT UNKNOWN,
3436 GENERAL PLUMBING SUPPLY CO
3439 YOUR STYLE DECOR
3441 CANYON GALLERY & ART CENTER
3448 AMERICAN CANYON CAR WASH
OCCUPANT UNKNOWN,
3450 OCCUPANT UNKNOWN,
3456 NAPA VALLEY RUG
NAVAJO RUG CO
NAVAJO RUG COMPANY
3462 EMERGENCY LOCKSMITH
MIKES ARCO MINI MART & GAS
3466 NAPA VALLEY CASINO
3470 MARTINEZ, ELISABETH
PENA, ANTONIO
3475 ACCESS ELECTRONIC SERVICES
3477 HAIRWORKS SALON
3600 GAIA NAPA VALLEY HOTEL & SPA
3631 BROADWAY LANDSCAPE MATERIALS
3635 MID CITY NURSERY
3657 ADAMS TIRES SERVICES
3663 OCCUPANT UNKNOWN,



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BROADWAY ST 2014 (Cont'd)

3665 OCCUPANT UNKNOWN,
 3700 AMERICAN CANYON MINI & RV STORAGE
 3800 FAIRFIELD INN & SUITES
 FAIRFIELD INN & SUITES NAPA AMERICAN
 3845 CANYON CAFE
 3853 MUFTAH, GHUZI
 NOOR, HAMID
 3860 CALIFORNIA DENTAL CARE
 CROWN REALTY PMPJ
 FARMERS INSURANCE GROUP
 3863 OCCUPANT UNKNOWN,
 3885 FABBRI STATUARY
 3915 AC FOOD & LIQUOR
 BROADWAY MARKET
 3919 ALL STAR HAIR SALON
 3927 CITY NAILS & SPA
 SKY NAIL SALON
 3945 TACOS MICHOACAN 2
 4115 MOTHER TEMPLE
 4207 GRANTS THRIFT STORE & MORE
 4209 BRUCE HURST STOVES & FIREWOOD
 HURST FIREWOOD & TREE SERVICE
 4211 INFINITY CONNECTIONS
 4215 LARRYS CUSTOM AUTO UPHOLSTERY
 4225 LARRYS CUSTOM TRUCK TOPPERS
 LARRYS TRADING POST
 4271 SANDOVAL, MIGUEL
 4381 CITY OF AMERICAN CANYON
 EAGLE VINES REALTY
 EAGLE VINES REALTYBUSINESS CENTER
 GUSTAVO PADILLA INS SVC
 JEREMEY REYES LAW JUSTICE
 YAMADA MARIKO ASSEMBLYWOMAN 4TH DIST
 4901 BAILEY BROS PERFORMANCE AUTO PARTS
 4905 B & B DISTRIBUTORS
 5353 PROFESSIONAL AUTOMOBILES
 R & S GLAZING SPECIALITIES INC
 T KO IRON WORKS
 5365 DOSHIER GREGSON INC
 DOSHIERGREGSON INC
 5425 ALCAN PACKAGING CAPSULES OF CA
 5431 SERVICE MASTER
 5505 VOLVO RENTS
 5555 GYPTECH
 K & B LOGISTIC INC
 SCHOTKA CONSTRUCTION INC
 5747 DIABLO TIMBER CORP
 5757 PACIFIC COAST CUSTOMS
 5759 AUTO SALVAGE
 PACIFIC AUTO SALVAGE INC

Target Street

Cross Street

Source

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BROADWAY ST 2014 (Cont'd)

6400 KOKOLIOS IRON WORKS & SUPPLY
NAPA VALLEY RC
6405 ANDERSON, KELLY

BROADWAY ST 2010

2740 MONTEVINO SALES INFORMATION
2902 ANDERSON, SAM S
ARAGON, KARMEN D
DEVERA, C
HERRERA, EDWARD
WELLS, VINCE T
3000 BABER, EMMA J
BARNETT, TONY W
BIDWELL, AUDREY K
BRETBRUNNER, ROBERT
BURNETT, KATHRYN J
BUSH, RICHARD A
CERDA, CLARE A
DAVENPORT, HENRY E
DAVIS, WARREN C
DEDICATORIA, MILAGROS R
DIRECT DENTAL ALTERNATIVES
DONDERO, MERYCE M
ELLIOTT, RICHARD W
FAMY, MARIA F
FOX, ANN
HAMILTON, THOMAS
HART, MARIAN J
HAWORTH, ARTHUR J
HOGENBOOM, MAURICE
IVIE, TERRY L
JOHNSON, DOROTHY F
KENNEDY, CHARLES T
KUEHLE, RICHARD J
KUSTER, RICHARD L
LAMIEL, ROSITA
LAS CASITAS NAPA MOBILE HOME
LEACH, DEOGRACIAS G
LEE, PEAK J
LEVETT, ROY R
LOPEZ, MARIA
MALICKIE, LINDA
MARIN, MICHELE M
MCMAHON, MARION A
MEJIA, GUILLERMINA
MOGG, THOMAS J
MOLLET, JUDITH A
MORRISON, CLIFF B
MULANAX, THELMA B
PAEDON, SUSIE E
PARRISH, ELLIE
PEAK, NORA E
PECK, JOE A
POWER, BOB L
PRICE, TRACY A

BROADWAY ST 2010 (Cont'd)

3000 RAY, CHARLES W
RICKER, ROBERT H
RILEY, GRETA A
ROBERTS, SONY
RODRIGUES, JOSEP G
ROSENBAUM, ROBERT C
SARGENT, FRANCES B
SAXTON, EDWARD A
SILVEIRA, STANLEY V
SOUSA, GEORGE R
STANDRIDGE, GLENN
TAN, U C
TAYLOR, MARILYN K
TURNER, WILLIAM H
VILLALOBOS, CIRILO C
WRIGHT, GENEVA
ZIVOT, LUCILLE

3302 OCCUPANT UNKNOWN,
3306 DONOHOE, MICHAEL F
3353 HANGER, PROSTHETICS
OPEN DOOR CHRISTIAN CHURCH

3417 BELLAHIGH PERFORMANCE TANNING
EYE CARE CTR OF NAPA
HARVEST PEDIATRICS
MALYS
SUBWAY
UMPQUA BANK

3419 BETTER HOMES REALTY
CANYON KAJUKENBO MARTIAL ARTS
COLDWELL BANKER
MASTER TECH
TECH NORTH
YUMMY GARDEN

3421 AMERICAN CANYON LIBRARY
WESTAMERICA BANK

3423 SERENITY DAY SPA SALON
3425 THAI KITCHEN AC
3427 BOLT STAFFING SVC INC
VALLEJO MOBILE HOME SALES

3429 DAVID R YORK CPA MST
K J NAILS
REMAX GOLD
SELECT MORTGAGE PLANNING
STATE FARM INSURANCE
TIFFYS
TINO, LEA
YORK, DAVID

3431 AMERICAN CANYON DENTAL CARE
AMERICAN CANYON FAMILY RSRC
CURVES

BROADWAY ST 2010 (Cont'd)

3431 EXCEL CARE IMMEDIATE CARE CTR
J N J BARBERSHOP
MUNOZ, LESLIE
NAPASOLANO MEDICAL GROUP

3433 DAVID COULOMBE INSURANCE
DE ANDA INSURANCE
FARMERS INSURANCE GROUP
FIRST AMERICAN TITLE INS CO
HANGER PROSTHETICS & ORTHOTICS
HOME INSTEAD SENIOR CARE
STUDIO 29 HAIR DESIGN

3434 OCCUPANT UNKNOWN,

3436 GENERAL PLUMBING SUPPLY CO

3448 BIG EASY CARWASH
OCCUPANT UNKNOWN,

3450 OCCUPANT UNKNOWN,

3456 NAPA VALLEY RUG
NAVAJO RUG CO

3466 NAPA VALLEY CASINO

3470 MASON, RENEE
WILLIAMS, GARY D

3471 TFM PAINT BALL SUPPLY

3475 OCCUPANT UNKNOWN,

3477 HAIRWORKS SALON

3479 AMERICAN CANYON CITIZENS ECHO

3519 OCCUPANT UNKNOWN,

3600 GAIA NAPA VALLEY HOTEL
SPA GAIA

3631 BROADWAY LANDSCAPE MATERIALS
SINGH, SUNNY

3635 MID CITY NURSERY

3657 ADAMS TIRES SVC

3663 OCCUPANT UNKNOWN,

3665 MODESTO, ROWENA

3700 AMERICAN CANYON MINI & RV STGE

3800 FAIRFIELD INN NAPA
YHB NAPA LLC

3845 CANYON CAFE

3853 NOOR, Y

3860 CALIFORNIA DENTAL CARE
FARMERS INSURANCE GROUP

3863 OCCUPANT UNKNOWN,

3885 FABBRI STATUARY

3915 BROADWAY MARKET

3919 ALL STARS HAIR SALON

3927 NAILS & SPA CITY

3945 CAFFINO INC
RANCHO GRANDE

4115 MOTHER TEMPLE

4207 COMMUNITY THRIFT SHOP

BROADWAY ST 2010 (Cont'd)

4209	BRUCE HURST FIREWOOD & TREE
4211	INFINITY CONNECTIONS
4225	DISCOUNT STATUARY
4301	NORTHERN CONTRACTORS CO INC
4381	AMERICAN CANYON BLDG INSPCTNS
	AMERICAN CANYON BUSINESS LCNS
	AMERICAN CANYON CITY CLERK
	AMERICAN CANYON CITY FINANCE
	AMERICAN CANYON CITY HALL
	AMERICAN CANYON CITY MANAGER
	AMERICAN CANYON CODE ENFRMNT
	AMERICAN CANYON ENGINEERING
	AMERICAN CANYON FINANCE
	AMERICAN CANYON FINANCE DEPT
	AMERICAN CANYON HUMAN RESOURCE
	AMERICAN CANYON PLANNING DEPT
	AMERICAN CANYON PUBLIC WORKS
	AMERICAN CANYON UTILITY WATER
	CABERNET CONTRACTORS
	CITY OF AMERICAN CANYON
	EAGLE VINES REALTY
	FOSS MARLENE
	GRAVETT & FRATER LLP
	NAPA LAND TITLE CO
4905	B & B DISTRIBUTORS
5353	LARRYS CUSTOM AUTO UPHOLSTERY
	LARRYS CUSTOM TRUCK TOPPERS
	SEAMS WHEN PIGS FLY
5365	DOSHIER GREGSON INC
5425	ALCAN PACKAGING
5431	SERVICE MASTER NVB
5455	REALROCK INDUSTRIES
5505	RENTAL SOLUTIONS
5555	BAY WIDE INSURANCE SVC
	K & B LOGISTIC INC
	PHARMACY INSURANCE
	SCHOTKA CONSTRUCTION INC
5757	PACIFIC COAST CUSTOMS
6400	CORNISH ENTERPRISE INC
	KOKOLIOS IRON WORKS & SUPPLY
6405	ALL METAL FABRICATION INC
	OCCUPANT UNKNOWN,

BROADWAY ST 2005

2902 ANDERSON, SAM S
ARIAS, JOSELINA G
CARLSEN, EILEEN A
CECILIA, V D
HERRERA, EDWARD
WELLS, VINCE T

3000 BABER, EMMA J
BARNETT, TONY
BLACKARD, BERNICE
BROTHERS, RALPH E
BUSH, RICHARD A
CIAMBETTI, ART
CLAPPER, SUSAN M
CLAYTON, DAVID L
CRIMMINS, LILLIAN E
DAVIS, WARREN
DEDICATORIA, MILAGROS R
DIRECT DENTAL ALTERNATIVES
DONDERO, MERCYE M
FANNIN, OLIVE K
FARIA, DAN L
FELDMAN, ELAINE
FUSARI, JACK A
GARDNER, MRJRIE L
GILMORE, ROGER L
HARINA, EUFEMIO C
HEIKKILA, LOIS D
HENRY, FRANCES
HOGENBOOM, MAURICE
KENNEDY, CHARLES T
KISER, JAMES W
LANGSTON, GWEN
LEACH, DEOGRACIAS G
LEE, PEAK J
LEVETT, ROY R
MCCARDLE, LAURA
MCDOWELL, FRED A
MCMAHON, MARION A
MICHAEL, STANLEY C
MOLLET, JUDITH A
MORRISON, PATRICIA J
MULANAX, THELMA B
OHARA, DONALD B
PAEDON, SUSIE E
PEAK, DANIEL J
PEAK, NORA E
PECK, JOE A
POWER, BOB L
PRICE, IRENE M
RICKER, ROBERT H

BROADWAY ST 2005 (Cont'd)

3000 RODRIGUES, JOSEP
SOOTER, JEAN J
SOUSA, GEORGE R
TAM, UC
TAN, U C
WALSH, RUSSELL N
WARNER, SUZANNE F
WEAVER, GEORGIA A
ZIVOT, LUCILLE

3306 DONOHOE, MICHAEL F

3330 GLOS, ELTON C

3353 HANGER, PROSTHETICS
OPEN DOOR CHRISTIAN CHURCH

3417 THE VINTAGE BANK

3419 AMERICAN CANYON CHAMBER O
K T NOODLE
MASTER TECHS
MASTER, TECHS
RE / MAX

3425 PIZZA KING GOURMET

3427 TAQUERIA ROSITA 2

3429 AMERICAN CYN CHAMBER COMMERCE
CANYON PLAZA MAIL CENTER
CARRILLO, GEORGE C
CONWELL, MICHELE
CROW, CHARLES W
GUTIERREZ, CESAR
HAMMER MIKE
HAMMER, MIKE
HYDROSCIENCE ENGINEERS INC
PRUDENTIAL CALIFORNIA REALTY
SANTA CLARA INVESTMENTS
STARR, NEDA J
TINO, LEA
URIBE, RITA L

3431 AMERICAN CANYON DENTAL CARE
LITTLE ANGEL PEDIACTRIC
SMART WIRELESS
V VELARDE MD
VILLA, JULIA

3433 COOK, ELDER A
COULOMBS DAVID INSURANCE AGENCY
DE ANDA INSURANCE
FACEY JOHN K
FACEY, JOHN K
FIRST AMERICAN TITLE CO OF NAPA
STUDIO 29 HAIR DESIGN

3438 ULTRAMAR

3439 SIGN FACTORY

3450 SALAS, RACHEL

BROADWAY ST 2005 (Cont'd)

3456 INTERNATIONAL TIMBER TRAD
3458 AMERICAN CANYON PIZZERIA
3460 CANYON MARKET
3462 MIKES ARCO REDWOOD 76
3470 GARCIA, MARISELA
HOEHN, JENNIFER R
JUAREZ, MARTHA
MARTINEZ, JUAN
PENA, CARLOS C
SANCHEZ, ORLANDO
WILDER, DONALD E
3471 THE NAPA SOLANO POST
3473 ALPHA REALTY
3475 OCCUPANT UNKNOWN,
3479 AMERICAN CANYON CITIZENS ECHO
3519 OCCUPANT UNKNOWN,
3657 ADAMS TIRES SERVICES
3663 OCCUPANT UNKNOWN,
3665 PEREZ, LEOCADIO M
3700 AMERICAN CANYON MINI & RV STORAGE
3751 NAPA COUNTY MOSQUITO ABATEMENT DISTR
3845 CANYON CAFE
3853 DETORO, DIANE C
3860 PALBYS RESTAURANT
3863 DELACY, MICHAEL D
3915 BROADWAY MARKET
3919 NOVA STYLE BEAUTY SALON
SKY COMMUNICATIONS
3921 REALTY WORLD PRIME VALLEY PROPERTIES
3945 RANCHO GRANDE
4115 MOTHER TEMPLE
4207 BOYS & GIRLS THRIFT SHOP
4209 HURST FIREWOOD
4211 INFINITY CONNECTIONS
5353 OCCUPANT UNKNOWN,
5425 PECHINEY CORK & SEAL OF CALIFORNIA
5431 SERVICEMASTER CLEAN
SERVICEMASTER OF VALLEJO & BENICIA
5555 SCHOTKA CONSTRUCTION INC
5757 PACIFIC COAST CUSTOMS
5759 PACIFIC AUTO SALVAGE INC
5790 AZEVEDO, RON
6240 RISTORANTE LA STRADA
6275 NATIONAL AUTO TRUCK DISMANTLERS
6400 KOKOLIOS IRON WORKS & SUPPLY

BROADWAY ST 2000

2850 WELLS, NANCY M
3000 LAS CASITAS NAPA MOBILE HOME PARK
3330 GLOS, ELTON C
3353 NOVA CARE ORTHOTICS & PROSTHETICS
OCCUPANT UNKNOWN,
ROBIN AIDS PROSTHETICS
ROBIN AIDS PROSTHETICS SEE
3420 OCCUPANT UNKNOWN,
3430 OCCUPANT UNKNOWN,
3431 OCCUPANT UNKNOWN,
3436 GENERAL PLUMBING SUPPLY COMPANY
3439 NOVELTY MANUFACTURING
OCCUPANT UNKNOWN,
3440 BEACON OIL COMPANY
OCCUPANT UNKNOWN,
3448 BOYD, KEVIN A
3450 MCDANIEL, DORIS B
3456 NAVAJO RUG CLEANING COMPANY
VILLAGE RUGS
3458 AMERICAN CANYON PIZZARIA
OCCUPANT UNKNOWN,
3460 CANYON MARKET
3464 LONG BILL RANERI & LONG ROOFING COMPANY
3466 OCCUPANT UNKNOWN,
3470 GARCIA, MARIA R
HERRERA, H
PENA, VICENTE
WILDER, DONALD E
3471 RICARDO'S DRIVING SCHOOL
3473 CENTURY 21 ALPHA REALTY
OCCUPANT UNKNOWN,
3475 BELYEA, SCOTT F
3519 OCCUPANT UNKNOWN,
3631 SPENCER, GREGORY P
3635 MID CITY NURSERY
3665 PEREZ, LEO
3700 AMERICAN CANYON MINI & RV STORAGE
MASON, AL
3845 CANYON CAFE
3915 BROADWAY MARKET
U HAUL COMPANY INDEPENDENT DEALERS
3919 LAWSONSS FURNITURE AND STUFF
3945 ESPRESSO EXPRESS
4207 BOYS & GIRLS THRIFT SHOP
4211 INFINITY CONNECTIONS
4215 LARRY'S CUSTOM AUTO UPHOLSTERY
4381 EARL'S RADIATOR EXCHANGE
RADIATOR EXCHANGE

BROADWAY ST 1995

2810 OCCUPANT UNKNOWNN
2850 WELLS, VINCE
2902 HEINZE, HAL
3000 AMEY, RAY
ANDERSON, PAUL M SR
BARNETT, TONY
CANTRIEL, D M
CARDARELLI, ROBERT J
CIAMBETTI, ART
CYR, ROLAND
DAFFERN, GWINN D
DAVIS, ROBERT W
ENGDAL, LEONARD L
ESSLINGER, MARVIN B
FANNIN, OLIVE
FARIA, LEONARD B
FLAHERTY, JAMES W
GEORGE, HARRIET
GLUM, CHARLES
GREENE, RICHARD W
HARLOWE, ARLINE E
HICKS, FRED D
HOGENBOOM, MAURICE
HOHL, CECIL
KASPER, J
KING, ROY
LACER, ALICE
LAMARCHE, D R
LAS CASITAS NAPA MOBILE HOME
LAWRENCE, N
LEGER, NADA J
LEVETT, ROY R
LOUGHMILLER, OTHIE L
MARTIN, EVELYN
MCCABE, E
MCCLUSKEY, JOAN C
MCCOLLISTER, J W JR
MEADOWS, ANN M
MICHAEL, STANLEY C
MORRISON, C B
NEILSEN, HENRY T
PAYNE, MIKE
PEAK, ORAL L
PECK, JOE A
PHILLIPS, DARREL W
PIRO, ALFRED J
PRETTYMAN, MAX W
PRICE, ELLIS H
RADKE, M A
SOOTER, ROBERT L

BROADWAY ST 1995 (Cont'd)

3000 SOUSA, GEORGE R
TALLMAN, C
THOMAS, JOHN C
TRAILER, CLARK M
WILLOUGHBY, A L
WILSON, ANSON A
YOUNG, KENNETH J
3302 REACH, EDITH
3330 GLOS, ELTON C
3353 ROBIN AIDS PROSTHETICS
3416 FLORES, PAULA A
TABANERA, CEDRIC P
3418 OCCUPANT UNKNOWNN
3420 WHEELER, ELMER J
3422 OCCUPANT UNKNOWNN
3426 ARNOLD, RICHARD
3430 WILLIAMS, THOMAS B
3431 DAVIS STABLES
DAVIS, JACK D
3434 OCCUPANT UNKNOWNN
3436 OCCUPANT UNKNOWNN
3438 FAST GAS
3440 SPERELL, J
3448 OCCUPANT UNKNOWNN
3450 OCCUPANT UNKNOWNN
3460 LAWSON DRIVE IN MARKET
LAWSON VIDEO
3462 OCCUPANT UNKNOWNN
WILLIAMS ARCO
3464 OCCUPANT UNKNOWNN
3470 LONG, DON
3471 FIRST AMERICAN TITLE INS CO
NORTHERN ABATEMENT CO
3519 BAUDE, GLENN D
3548 J C HOME REALTY
3635 MID CITY NURSERY
3663 SANTOS, AMADOR
3665 PEREZ, L
3700 AMERICAN CANYON MINI & RV STRG
SEAMAN, CINDI C
3845 CANYON CAFE
3915 FLORES MARKET
3919 FURNITURE 4 LESS
4115 MOTHER TEMPLE
4201 OREGON FIREWOOD INC
4205 AUCTION AUTO BROKERS
4209 PORTER, MARK L
4211 CUSTOM TRUCK TOPPERS
4215 LARRYS CUSTOM AUTO UPHOLSTERY
4381 EARLS RADIATOR EXCHANGE

Target Street

Cross Street

Source

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BROADWAY ST 1995 (Cont'd)

4391 BECHTOLD, JOE
THORNBURY, CRAIG
4841 ATLAS LIFT WEST INC
5505 POWERHOUSE DIESEL SVC INC

BROADWAY ST 1992

2810 RIORDAN, TIM
2850 WELLS, VINCE
2902 HEINZE, HAL
3000 AMEY, RAY
DAVIS, ROBERT W
FARIA, LEONARD B
HOGENBOOM, MAURICE
LAMARCHE, D R
LAS CASITAS MBL PRK
LUTHOLD, AL
MCCOLLISTER, J W JR
RADKE, MELVIN A
RITCHEY, C A
TRAILER, CLARK M
3330 GLOS, ELTON C
3353 OMAI CLOTHING
ROBIN AIDS PROSTH
3430 WILLIAMS, THOMAS B
3431 DAVIS STABLES
3439 NOVELTY MFG INC
3440 BEACON OIL CO
3448 GONZALEZ, JULIA
3450 MCDANIEL, AUDREY
3456 NAVAJO RUG CLEAN
3458 J C HOME REALTY
OUR CITY OUR FUTURE
3460 LAWSON DRIVE IN MKT
3462 WILLIAMS GEO PETRLM
3471 FIRST AMER TITLE
NORTHN ABATEMENT CO
3475 MYRNAS
3519 BAUDE, GLENN D
3635 MID CITY NURSERY
3700 AMER CNYN MINI STRG
U HAUL CO DEALERS
3845 CANYON CAFE
3853 ALLEN, GEORGE A JR
3860 PALBYS RESTAURANT
3915 FLORES MARKET
3919 FURNITURE 4 LESS
3945 COUNTRY KITCHEN
4115 MOTHER TEMPLE
4211 NATL SANITARY CO
4215 LARRYS CSTM ATO UPH
4381 EARLS RDTR EXCHANGE
4391 BECHTOLD, JOE
INDEP STAVE CO
YOUNG, RON
4841 ATLAS LIFT WEST INC
4901 C D I INC

BROADWAY ST 1988**CRAWFORD WAY INTERSECTS**

- 3416 Tabanera Cedric P ☉
 3418 Holcomb Raymond ☉
 3420 Wheeler Elmer J ☉ 642-1956
 3422 Anderson J Bud ☉ 642-2610
 3423 American Canyon Medical Offices phys
 & surgeons 552-7421
 3426 Arnold Richd
 3430 Williams Thos B ☉ 644-1285
 3431 Davis Stables 554-4779
 Davis Jack D ☉
 3434 Staton Ethel I
 3434a Ayala E
 3436 Galaxie Boats Sales & Serv 553-1450
 Dick's Camper & Trailer & Sales &
 Service 552-4926
 3437 Vacant
 3438 Fast Gas serv sta 554-8781
 3439 Novelty Manufacturing Inc sign
 557-1817
 Gish Robt W ☉ 642-2827
 3440 Vacant
 3448 Vacant
 3450 Mc Daniel Doris B Mrs 553-8050
 3456 American Canyon Storage 643-4575
 Navajo Rug Cleaning Co Inc 643-4575
 3458 Rainbow Home Care Services 644-4093
 3460 Lawson's Drive In Market 642-2703
 U S Postal Serv (American Canyon
 Br) 642-2703
 Vacant

DONALDSON WAY INTERSECTS

- 3462 Rich's Arco gas sta 648-9486
 3464 Vacant
 3466 Napa Valley Casino beer & wine
 644-0417
 3470 Apartments
 1 Staten Frank
 2 Mitchell Robert C
 3 Salinas Jose A
 4 Boyd Christi
 5★Estrada Juan R 552-7192
 6 No Return
 3471 Turn Around Service Inc 644-2183
 Lawton Industries 648-0137

BROADWAY ST 1988

BROADWAY ST-Contd

3473 Farmer Insurance ins 557-8663

3475 Alouette Spa therapeutic massage
552-2337

3477 Family Barber Shop 552-2404

3479 Canyon Properties real est 554-3000

3519 Hayter

3631 Papoulias Mary Mrs © 554-4538

3635 Mid-City Nursery Inc 642-4167

3657 M D Tires 642-8473

3659 Vacant

3663 Vacant

3665 Lippincott Chas A © 557-1131

3700 American Canyon Mini & R V Stge
642-7437

3751 Vacant

3787 Cook Robt G 552-2403

Rear De Castro Jaime

3845 Canyon Cafe

3853 Allen Geo A Jr 642-3020

3853½ Schultz John T 557-4505

3860 Palby's Restaurant 648-9399

Palby's Gift Shop 648-9399

3863 Howard Vonda M ©

3885 Spa-Land Gardens 642-7777

POCO WAY INTERSECTS

S NAPA JUNCTION RD INTERSECTS

3915 Sam's General Store groc sls 644-6065

3919 Money Saver Furn retail 554-4855

3945 Johnny U's Sandwiches restaurants

RIO DEL MAR INTERSECTS

4115 Mother Temple palm reader 648-9279

Johnson Mary Mrs 554-3062

BROADWAY ST 1984

CRAWFORD WAY INTERSECTS

- 3416 Tabanera Cedric P ©
 3418 Holcomb Raymond ©
 3420 Wheeler Elmer J © 642-1956
 3422 Anderson J Bud © 642-2610
 3423 Napa Valley Bank 553-9211
 3426 Arnold Richd
 3430 Williams Thos B © 644-1285
 3431 Davis Stables 554-4779
 Davis Jack D ©
 3434 Staton Ethel I
 3434a Vacant
 3436 Dick's Camper & Trailer & Sales &
 Service 552-4926
 3438 Fast Gas gas sta 552-9422
 3439 Gish Robt W © 642-2827
 3439a Timber Land Display stge
 3440★Lopez Raymond M
 3441 Timberland Display Inc sign mfg
 552-2789
 3448★Pelayo Emelio
 3450 Mc Daniel Audrey 553-8050
 3456 American Canyon Storage
 Navajo Rug Cleaning Co 643-4575
 3458 Vacant
 3460 Lawson's Drive In Market 642-2703
 U S Postal Serv (American Canyon Br)
 642-2703

DONALDSON WAY INTERSECTS

- 3462 Rich's Arco 552-9486
 3464 Collie Bennie C 552-4163
 3466 Parlay Club beer & wine 644-0417
 3470 Apartments
 1 Staten Frank
 2 No Return
 3 Salinas Jose A 643-8938
 4★Boyd Christi

BROADWAY ST 1984

5 Kresha Ralph J
 6 Salinas Jose V 642-6302
 3471 Canyon Properties (Home Realty Services) 554-3000
 3473 Boman Industries t v satillite prods
 3475 Alouetta Spa therapeutic massage 552-2337
 3477 Family Barber Shop 552-2404
 3479 Canyon Properties (Ofc)
 3519★Edwards Glenda J
 3631 Papoulias Mary Mrs © 554-4538
 3635 Mid-City Nursery Inc 642-4167
 3657 Western Kawasaki 552-6440
 3659 Western Kawasaki serv dept 552-6440
 3663 Buzarellos Carrie Mrs © 644-0201
 3665★Lippincott Chas A 557-1731
 3700 Vacant
 3702 Vacant
 3710 Paoli Ronald L 642-2845
 3712 Paoli Jean P Mrs 643-6785
 3716 Vacant
 3740★Wake Rosemary 557-2059
 3751 American Canyon County Water Dist 642-4478
 3787 O'Banion Enterprizes Firewood Div wood for furn & fire 644-5515
 Rear O'Banion Joe D © 644-5516
 3845 A & W Root Beer 644-5011
 3853★Allen Geo A 642-3020
 3853½★Schultz John T 557-7450
 3860 Palby's Restaurant 552-9399
 3863 Howard Vonda M ©
 3885 Arbor Nursery 642-7777
 POCO WAY INTERSECTS
 S NAPA JUNCTION RD INTERSECTS
 3915 Denny's General Store groc sls 644-6065
 3945 Patty's Cook House restr 552-1150
 RIO DEL MAR INTERSECTS
 4115 Johnson Mary Mrs 552-9279
 4205 Vacant
 4211 National Sanitary Co toilets-portable 644-1656
 4215 Vintage Bowl bowling alley 557-0373
 Larry's Custom Auto Upholstery 554-4256
 4221 Vacant
 4225 Island Aquarium 552-7380
 FRONTAGE RD INTERSECTS

BROADWAY ST 1979

CRAWFORD WAY INTERSECTS

- 3416 Biggs Clifford bldg contr ©**
- 3418 Holcomb Raymond ©**
- 3420 Wheeler Elmer J © 642-1956**
- 3422★Anderson J B © 642-2610**
- 3426 Vacant**
- 3430 Williams Thos B © 644-1285**
- 3431 Davis Jack ©**
- 3434 Vacant**
- 3436 Dick's Camper & Trailer Sales 552-4926**
- 3438 Freddy Fast Gas 552-9422**
- 3439 Gish R W © 642-2827**
- 3440 Vacant**
- 3441 Home Realty Service 644-4177**
- 3443 Vacant**
- 3448 Vacant**
- 3456 Navajo Rug & Upholstery Cleaners
643-4575**
- 3458 Cummans Antiques 552-6323**

BROADWAY ST 1979

3460 Lawson's Drive In Market 642-2703
 U S Postal Serv (American Canyon Br)
 642-2703

DONALDSON WAY INTERSECTS

FRISBEE LA INTERSECTS

3462 Rich's Arco Service 643-9781

3464 Vacant

3466 Vacant

3631 Padoulias Mary Mrs ©

3635 Mid-City Nursery Inc 642-4167

3655 Vacant

3657 Western Kawasaki 552-6440

3659 Roderick's Well Digger Rentals 643-8518

3663 Buzarellos Carrie Mrs © 644-0201

3665 Swanson Arth A

3700★Phillips Jim

3702 Vacant

3704 Barrios Louie 643-9074

3708 Vacant

3710 Paoli Ronald L 642-2845

3712 Paoli Angelo 643-6785

3716 Cleeton Karl

3751 American Canyon County Water Dist
 642-4478

3787 O'Banion Joe D trucking © 644-5515

3845 A & W Root Beer 644-5011

3853 Makris T G

3853½ Haskins James F

3860 Palby's Restaurant & Gift Shop
 643-9438

Freskan Peter © 643-9438

POCO WAY INTERSECTS

S NAPA JUNCTION RD INTERSECTS

3863 Howard Burl L © 552-7773

3885 Arbor Nursery 642-7777

3915 Denny's General Store 644-6065

3945 Barb's Place tavern

RIO DEL MAR INTERSECTS

4115 Johnson Mary Mrs palmist 552-9279

4205 Vacant

4207 Vacant

4209 Vacant

4211 Vacant

4215 Vintage Bowl bowling alley 642-7200

4221 Vacant

4225 Vacant

4625 Earl's Auto Dismantlers 643-2591

5755 Maher Patk W © 648-1426

5759 Pacific Auto Salvage Inc 642-8991

BROADWAY ST 1974**CRAWFORD WAY INTERSECTS**

3420 Wheeler Elmer J © 642-1956
 3422 Davis Corbett A © 644-2163
 3426 Arnold Richd ©
 3430 Williams Thos B © 644-1285
 3431 Robinson Gerald W 644-5816
 3434★Estigoy Antonio rest home 642-8833
 3436 Dick's Camper & Trailer Sales 691-4926
 3438 Freddy Fast Gas 643-9456
 3439 Gish Robt W © 642-2827
 3440 Hodges Rest Home 642-1706
 3441 Vacant
 3443 Chickie's Variety Dance Studio 642-1558
 3448 Hodges Rest Home
 3456 Navajo Rug & Upholstery Cleaners
 643-4575
 3458 Vacant
 3460 Lawson's Drive In Market 642-2703
 U S Postal Serv (American Canyon Br)
 642-2703

DONALDSON WAY INTERSECTS**FRISBEE LA INTERSECTS**

3462 Rick's Arco Service 643-9781
 3464★Newell Monica
 3466 Paul's Tavern 643-9693
 3631 Papoulias Mary Mrs © 642-3066
 3635 Mid-City Nursery 642-4167
 3655 Deal Wayne
 3657 Payless Lumber 643-4736
 3659 Roderick's Well Digger Rentals 643-8518
 3663 Buzarellos Michl N © 644-0201
 3665 Swanson Arth A
 3700★Crowell John
 3702★Haskins Douglas
 3704 Barrios Louis 643-9074
 3710 Paoli Ronald L 642-2845
 3712 Paoli Angelo 643-6785
 3716★Miller Richd J 691-0696
 3751 American Canyon County Water Dist
 642-4478
 3787 Vacant
 3845 A & W Root Beer 644-5011
 3853★Crandell Willie D 691-5290
 3853½ Vacant
 3860 Palby's restr 643-9438
 Freakan Peter © 643-9438

POCO WAY INTERSECTS**SO NAPA JUNCTION RD INTERSECTS**

3863 Howard Burl L
 3915 Denny's General Store 644-6065
 3945 Pizza Kitchen 691-1150

RIO DEL MAR INTERSECTS

4115 Johnson Mary Mrs palmist 643-9860
 Williams Laura palmist
 4205 Margie's Tavern 643-9271
 4207 Vacant
 4209 Vacant
 4211 Jean's Mobile Movers transport serv
 691-6642
 4213 Vacant
 4215 Town & Country Bowl 644-9743
 4217 Vacant
 4219 Vacant
 4225 Hughes Plywood Co 643-4084
 5755★Maher Patk W © 648-1428

BROADWAY ST 1970

3420 Henriques Bill
 3422 Davis Corbett A © 644-2163
 3426 Arnold Wesly B ©
 3430 Williams Thos B © 644-1285
 3431 Robinson Gerald W 644-5816
 3434 Mendoza Manuel 644-2043
 3439 Gish Robt W © 642-2827
 3440 Warthen M Ray © 644-7381
 3448 Davis Bob A 643-8796
 3456 Navajo Rug & Upholstery Cleaners
 643-5192
 3458 Broadway Coin Laundry
 3460 Ascherman's Drive In Market 642-2703
 Miller's Meat Market 642-2703
 U S P O (American Canyon Br)
 3462 Rich & Bill's Richfield Service 643-9781
 3464 Lynch Richd R 648-1654
 3466 Paul's Tavern 643-9419
 3631 Papoulias Gus © 642-3066
 3635 Mid-City Nursery 642-4167
 3655 Vacant
 3657 Payless Lumber 643-4736
 Mc Bride Patrick G
 3659 Rodrick Joe
 3663 Buzarellos Michl N © 644-0201
 3665 Swanson Arth A 644-7821
 3700 Vacant
 3702 Vacant
 3704 Barrios Louis 643-9074
 3710 Paoli Ronald L 642-2845
 3712 Paoli Angelo 643-6785
 3751 American Canyon County Water
 District 642-4478
 3787 A & A Metal Products aluminum
 products 642-5576
 3845 A & W Root Beer 643-9707
 3852 Wikes Robt L 644-0794
 3853½ Vacant

BROADWAY ST 1970**BROADWAY ST—Contd**

3860 Palby's restr 643-9438
Freskan Peter © 643-9438
3863 Howard Dianne © 648-1389
3915 Denny's General Store 644-6065
3945 Chickie's Drive-In restr 643-9224
4115 Johnson Mary Mrs palmist 643-9860
4203 Vacant
4205 Le Red Garter Tavern
4207 Vacant
4209 Town & Country Beauty Salon
644-7319
4211 Vacant
4213 Vacant
Vacant
4213a Vacant
4215 Burgundy Room tavern 643-9243
Vintage Bowl 644-9743
4217 Vacant
4225 Hughes Plywood Co 643-4084
Hughes John 643-4084

BROADWAY ST 1965

BROADWAY ST--CONTD
 3430 WILLIAMS THOS B •
 644-1285
 3431 HERBIE'S HENNER
 EGGS 642-6398
 HELM WM • 643-9686
 3434 MC JUNKIN ROBT
 644-0869
 3439 GISH ROBT W •
 642-2827
 3440 WARTHEN M R •
 644-7381
 3448 BROOKS LOUISE J MRS
 644-7687
 3456 NAVAJO RUG &
 UPHOLSTERY CLEANERS
 643-5192
 3460 ASCHERMAN'S DRIVE IN
 MARKET GROS
 642-2703
 ASCHERMAN CALVIN •
 642-2703
 MILLER'S MEAT MARKET
 642-2703
 3462 GRADY'S RICHFIELD
 SERVICE GAS STA
 643-9781
 3466 MERLE'S TAVERN
 643-9744
 3631 PAPOULIAS GUS •
 642-3066
 3635 MID-CITY NURSERY
 PLANTS 642-4167
 3657 BUILDER'S MART
 643-1221
 3657A NC RETURN
 3663 BUZARELLOS MICHL N •
 644-0201
 3665 CSTERBERG ALBERT A
 3700 SPILLMAN ARTH
 3702 BUZARELLOS GEO
 3704 BARRIOS LOUIS
 643-9074
 3708 FARQUHAR CHARLES
 3710 PAGLI RONALD L
 642-2845
 3712 PAGLI ANGELO
 643-6785
 3714 MIKE'S FRUIT STAND
 3751 A & A METAL PRODUCTS
 AWNINGS 642-5576
 3787 THOMPSON RAYMOND G •

3845 A & W ROOT BEER
 RESTR 643-9707
 3853 CAMP FRANK 642-9060
 3853½ O'GRADY WM
 3860 PALBY'S RESTR
 643-9438
 PALBY'S FISHING
 643-9438
 PATIO GIFTS 643-9438
 FRESKAN PETER •
 643-9438
 3863 NORDGARD FRED •
 642-9498
 3915 MOBILE GROCERY GROS
 643-4423
 WEED SHIRLEY MRS •
 644-4423
 3945 CHICKIE'S DRIVE-IN
 RESTR 643-9534
 4115 JOHNSON MARY MRS
 643-9860
 4213 ED'S GARAGE AUTO
 REPR 643-5926
 MIDWAY AUTO SERVICE
 GAS STA 643-5926

 70
 BROOKE DR -FROM DRYDEN DR
 EAST 1 NORTH OF
 FERNWOOD

 84
 BROOKWOOD DR -FROM
 GREENWOOD AV SOUTH
 802 BARN ROBT L •
 644-3215
 803 FISTER WALTER M
 642-2468
 812 BCYSEN ERIE R •
 642-3340
 813 WILCOX HARRY •
 642-4274
 818 BETTENCOURT VERN F •
 643-7705
 819 LARSON BETTY L MRS •
 824 FITZER JACK H •
 643-5728
 825 DUFFIELD GILBERT W •
 642-7175

Appendix F

American Canyon Apartment Property
Broadway Street
American Canyon, CA 94503

Inquiry Number: 6021668.3
March 24, 2020

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/24/20

Site Name:

American Canyon Apartment P
Broadway Street
American Canyon, CA 94503
EDR Inquiry # 6021668.3

Client Name:

Krazan & Associates, Inc.
4320 Orange Grove Avenue Suite E
Sacramento, CA 95841
Contact: Bill Vick



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 3820-4CBD-A608
PO # NA
Project 034-20013



Sanborn® Library search results

Certification #: 3820-4CBD-A608

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Appendix G



GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER INTERVIEW QUESTIONNAIRE**

Date: March 24, 2020 Krazan Project Manager: Bill Vick

Project No: 034-20013 Project Name: Proposed American Canyon Apartment Property

Site Address: Broadway Street, American Canyon, California 94503; APNs 058-362-005, -016 and -021

Interview With: BRUCE PETERS

Telephone No: 707-328-7048 E-MAIL: PORTOFINOREAL@GMAIL.COM
Fax No: _____

Knowledge of Previous Owner(s) and Phone Number? N/A

How are you associated with the subject property? Property Owner's Representative

How long have you been associated with the subject property? 20 YRS

What is the subject property currently used for? VACANT

Are there structures on the subject property? NO How Many? -0-

Do you know of any previous structures on the subject property? YES, SMALL RESIDENCE

Do you have knowledge of the presence of underground storage tanks being located on the subject property either historically or currently? NO

Do you have knowledge of the presence of aboveground storage tanks being located on the subject property either historically or currently? NO

Do you have knowledge of the presence of imported soil on the subject property? If so, please indicate the origin/location of the imported soil. NO

Do you know of any chemicals, hazardous materials, and/or environmentally persistent pesticides/herbicides being used, stored or discharged on the subject property? NO

Do you know of any buried materials such as garbage dumps or burn pits located on the subject property? NO

Do you know of any septic systems located on the subject property (current or historical)? Yes No
If yes, how many? _____

Do you know of any water wells located on the subject property (current or historical)? Yes No
If yes, how many? _____

Do you know of any dry wells located on the subject property (current or historical)? Yes No

215 West Dakota Avenue • Clovis, California 93612 • (916) 564-2200 • FAX (916) 564-2222
With Offices Serving the Western United States

Property Owner Environmental Owner Environmental Questionnaire.doc

Do you know of any environmental monitoring wells located on the subject property (current or historical)? Yes No

Do you know of any drainage or disposal ponds located on the subject property? NO

Is the subject property connected to municipal water and sewer systems? YES, CAPED

Do you know of obvious indications pointing to the presence or likely presence of contamination of the subject property?
NO

Do you have any concerns about adjacent property usage such as gasoline stations, industrial uses, or USTs/ASTs on adjacent properties? NO, EXCEPT MOSQUITO ABATEMENT DIST. OFFICE

Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law?
NO

Are you aware of any activity use limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
NO,

Do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject property or an adjacent property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
NO

Does the purchase price being paid for the subject property reasonably reflect the fair market value of the subject property?
 Yes No

Do you know the past uses of the subject property? If so, briefly explain.
RESIDENCE

Do you know of specific chemicals that are present or once were present at the subject property? If so, briefly explain.
NO

Do you know of spills or other chemical releases that have taken place at the subject property?
If so, briefly explain.

NO

Do you know of any environmental cleanups that have taken place at the subject property?
If so, briefly explain.

NO

What is the reason for preparation of this Phase I ESA? (Property purchase/sale; bank loan; proposed development; etc.)

REQUEST OF BUYER

Name: BRUCE PETERS
(Please Print)

Date: 4-14-2020

Signature: Bruce Peters

Appendix H



A Tradition of Stewardship
A Commitment to Service

UNIFIED PROGRAMS INSPECTION REPORT
Napa County Department of Planning, Building, & Environmental Services
1195 Third Street, Suite 210 • Napa, CA 94559 • Phone (707) 253-4471 • Fax (707)
253-4545
www.countyofnapa.org

Facility Name: AMERICAN CANYON CITY WATER DISTRICT Facility No.: 5062 Date: 04/06/1999 Time In:
Address: 3751 NAPA VALLEJO HWY AMERICAN CANYON, CA 94503 Owner: American Canyon City
Inspection Type: Routine

OBSERVATIONS AND CORRECTIVE ACTIONS

Additional Comments:

By signing this report, the facility has granted consent to conduct an inspection. This report also constitutes a NOTICE TO COMPLY. It may identify conditions observed this date that are alleged to be violations of one or more sections of the California Health & Safety Code, and/or Title 19, 22, 23, or 27 of the California Code of Regulations relating to the management of hazardous materials, hazardous waste, aboveground or underground storage tanks. For more information please visit <http://www.calepa.gov/CUPA/lawsregs>. The violations may be described in more detail on additional sheets. If any violations or required corrections are noted, the facility is required to submit either requested information or a signed document certifying the facility's return to compliance within 30 days, unless otherwise specified. This office may re-inspect the facility at any time to verify compliance with this inspection report. Disputes to this inspection report must be made in writing within 30 days of the signature date.

Inspected
By:



Doug Calhoun

Facility
Representative:





A Tradition of Stewardship
A Commitment to Service

UNIFIED PROGRAMS INSPECTION REPORT
Napa County Department of Planning, Building, & Environmental Services
1195 Third Street, Suite 210 • Napa, CA 94559 • Phone (707) 253-4471 • Fax (707)
253-4545
www.countyofnapa.org

Facility Name: COUNTY OF NAPA: MOSQUITO ABATEMENT Facility No.: 4081 Date: 04/22/1999 Time In:
Address: 3751 BROADWAY ST AMERICAN CANYON, CA 94503 Owner: Lewis E. Risley
Inspection Type: Routine

OBSERVATIONS AND CORRECTIVE ACTIONS

Additional Comments:

By signing this report, the facility has granted consent to conduct an inspection. This report also constitutes a NOTICE TO COMPLY. It may identify conditions observed this date that are alleged to be violations of one or more sections of the California Health & Safety Code, and/or Title 19, 22, 23, or 27 of the California Code of Regulations relating to the management of hazardous materials, hazardous waste, aboveground or underground storage tanks. For more information please visit <http://www.calepa.gov/CUPA/lawsregs>. The violations may be described in more detail on additional sheets. If any violations or required corrections are noted, the facility is required to submit either requested information or a signed document certifying the facility's return to compliance within 30 days, unless otherwise specified. This office may re-inspect the facility at any time to verify compliance with this inspection report. Disputes to this inspection report must be made in writing within 30 days of the signature date.

Inspected
By: _____



Facility
Representative: _____



Job # 70-00176 176
PMT
2003

PERMIT APPLICATION NAPA COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT			
Napa County Use Only FEE EXEMPT SITE: Y <input checked="" type="radio"/> N IF NO, FEE \$ 78.00 Date: 5/16/03 By: [Signature] Receipt #: 28665		Application for: Monitoring Wells _____ Extraction Wells _____ Other _____ Catholic Protection Wells _____ Exploratory Hole (boring) <input checked="" type="checkbox"/> (Please check one) Mon 380 NCDEM SITE NUMBER ASSESSOR'S PARCEL NUMBER 05B-362-013/014 PARCELB	
The following MUST be included before this permit application can be processed: 1. Assessor's Parcel Number 2. Well location map (showing both proposed and existing wells) 3. Permission document(s) (if required) 4. Encroachment permit(s) (if required) 5. Clearance from public agency(ies) (if required)			
Site Name: NAPA COUNTY Mosquito Abat.		Property Owner: NAPA CO. MOSQUITO ABATEMENT DIST	
Site Address: 3751 BROADWAY		City: AMERICAN CANYON Zip: 94503	
Owner's Mailing Address: PO BOX 10053		City: AMERICAN CANYON Zip: 94503	
Drilling Contractor: HORIZON DRILLING		Type of License: C-57	
Mailing Address: PO BOX 133		License #: 773230	
City: ESCALON	State: CA	Zip: 95320	
Consultant: MILSTONE GEOTECHNICAL		Telephone #: 408 353 5528	
Address: 17020 MELODY LANE		City: LOS ATOS	State: CA Zip: 95033
Responsible Person at Site: RAY FISHER CALL 925 968-1691			
Type of Work			
New Construction of wells BORINGS # of wells 5 TO 6		Destruction of wells - _____ # of wells _____	
Reconditioning of wells (reconstruct or repair) - _____ # of wells _____		_____ # of wells _____	
Wells currently on Site? - N/A - # of wells _____		SOIL BORINGS BACKFILLED W/ PORT CEM GRADUT	
Reason for Well Installation (Check as many as apply): SOIL BORINGS			
Underground tank site:		Surface Impoundment:	
Tanks Still Present:		Landfill Site:	
Spill or Discharge Site:		Cathodic Protection:	
Baseline Study:		Other: GEOTECHNICAL / FOUNDATION STUDY	
Other Site Information:			
Closest Distance to:			
Septic System:	Sewer Line:	Water Wells:	Rivers, Creeks, or Lakes:
Underground Utilities:	Underground Storage Tanks:		
Riparian Cover Permit Required? Yes _____ No _____			
Issued by the County Public Works Dept. (Attach Copy)			
May apply to any site outside City limits and within 150 feet of a designated waterway.			

Permit Application

Page 2 of 2

Well Location: Are all wells covered by this application on a single parcel and not on adjoining Parcels or public or utility rights-of-way? Yes No If no, list other parcels, public rights-of-way or utility rights-of-way.

1. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

2. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

3. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

NOTE: For each parcel listed above which is under different ownership, a letter authorizing access and work on the property must be submitted. The letter must include address, Assessor's parcel number and the notarized signature of the owner or leg agent for the owner. If any wells are proposed on public or utility rights-of-way, a written clearance and/or encroachment permit must accompany this application.

Well Construction

Bore Hole Diameter: 6"	Maximum Depth: 45'	Annular Space: N/A	SOIL BORING
Casing: Diameter: N/A	Gauge: N/A	Material: N/A	
Grout: Depth of Seal: MAX DEPTH OF BORING	Type of Grout: PORTLAND CEMENT		
Conductor Casing: Yes	No <input checked="" type="checkbox"/>		

Check if wells are intended to be constructed into aquifers below the first encountered one. Indicate how cross contamination will be prevented on a separate sheet.

Well reconstruction and destruction applications must include a written description of work proposed And existing well information.

Disposal Methods

Soil Cuttings ON SITE - LANDSCAPE AREA Development/Rinsate Water ON SITE - NO CONTAM.

In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:

- 1) Compliance with the State of California Worker's Compensation Laws;
- 2) Compliance with the State and Federal Worker Health and Safety Laws;
- 3) Location of all underground and aboveground utilities which might be impacted by the proposed work;
- 4) Compliance with the Napa County and State of California well requirements;
- 5) Notification of the Department of Environmental Management at least two (2) workdays before work is initiated, and
- 6) Filing a completed well log for each well within four (4) months of completion to Napa County Department of Environmental Management and State Department of Water Resources.

Raymond Fisher FOR MILSTONE GEOTECHNICAL 5/15/03
 Signature of Authorized Agent of Drilling Contractor Date
 Or Site Consultant

FOR OFFICIAL USE ONLY:
 Required certificate of current worker's compensation insurance is on file with DEM;
 Consultant: Exp. Date: _____ Confirmed: _____
 Contractor: Exp. Date: _____ Confirmed: _____ CERTIFY THEY HAVE NO EMPLOYEES

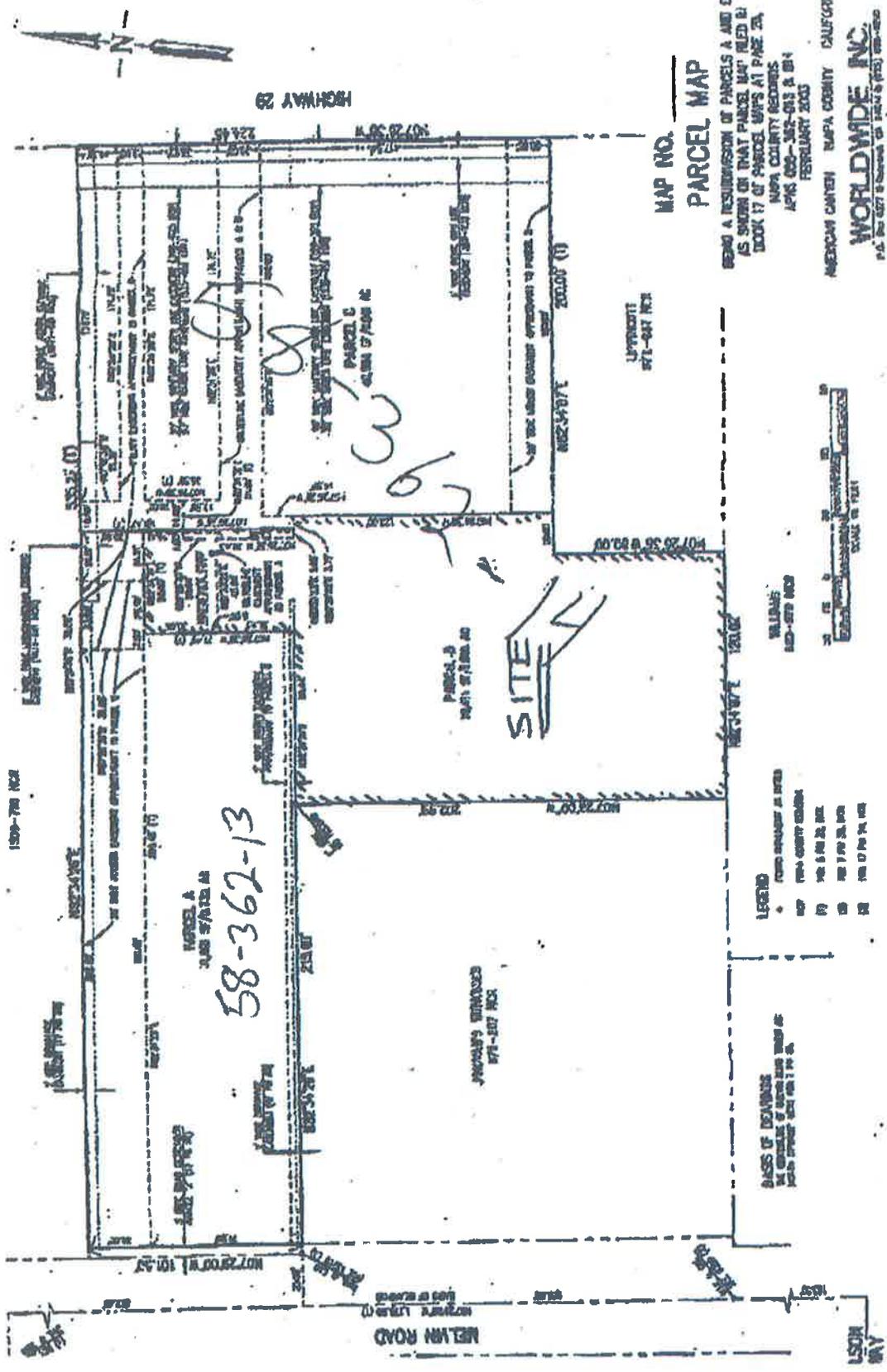
Permit Issued by: [Signature] Date: 5/19/03
 Permit is valid for two (2) years from date of issuance.

White - Office

Yellow - Owner

Pink - Consultant/Contractor

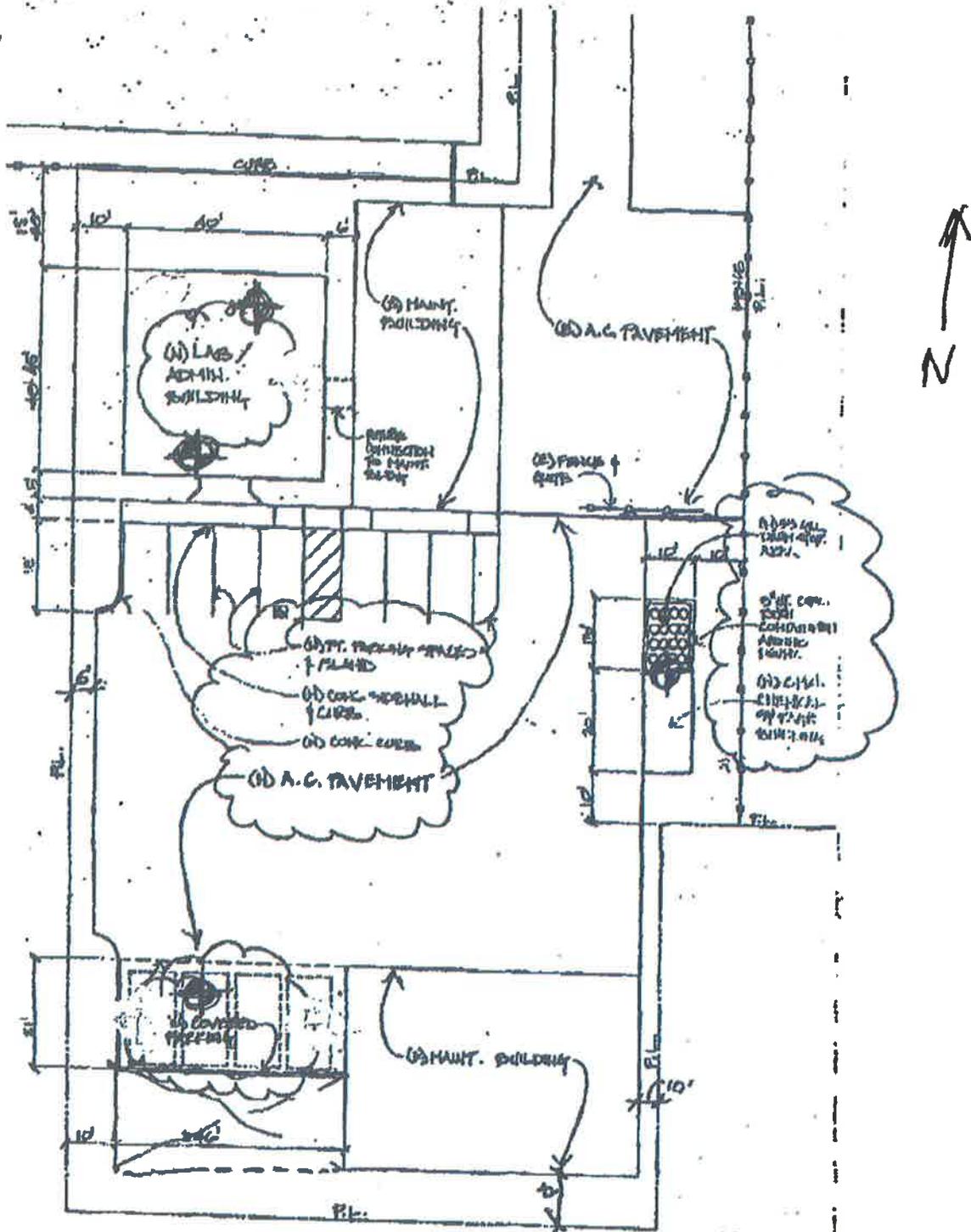
3751 BROADWAY
 AMERICAN CANYON, CA
 SITE LOCATION MAP (2 OF 2)



MAP NO. _____
 PARCEL MAP

BEING A RESUBMISSION OF PARCELS A AND B AS SHOWN ON THAT PARCEL MAP FILED IN BOOK 17 OF PARCEL MAPS AT PAGE 20, NAPA COUNTY RECORDS, APNS 000-182-013 & 014, FEBRUARY 2003.

AMERICAN CANYON NAPA COUNTY CALIFORNIA
WORLDWIDE INC.
 P.O. Box 6077 • Napa, CA 94558 • (707) 253-1100



SITE PLAN (PROPOSED)

NAPA CO. MOUNDITO

3751 BROADWAY
 AMERICAN CANYON, CA
 BORING LOCATION MAP

CUPA INSPECTION REPORT

Napa County Department of Environmental Management

FACILITY NAME Mosquito Abatement

1195 3RD ST
W. PC CA 94559 MF# 1825 SITE# 1

STATUTE/CODE	OBSERVATIONS/COMMENTS & CORRECTIVE ACTION REQUIRED
H.S. Code 25505	<p>Mosquito Abatement has moved to facility on Melrose Rd. Updated Hazardous Materials Business Plan (HMBP) required for current site.</p> <p>Please submit updated information on new found in green booklet received during inspection. Include:</p> <ul style="list-style-type: none"> ① Business Activities ② Business Owner/Operator ID ③ Inventory form for hazardous materials of A 55 gal, 200 cuft, 500 lbs. ④ Updated maps ⑤ Copy of Updated Emergency Response Plan
H.S. Code 25479a	<p>Please label used oil containers in shop. Observed black/white containers for used oil w/o label.</p>
	<p><u>Comments</u></p> <ul style="list-style-type: none"> ① Used oil disposed of @ cargo yard ② Complete inventory forms for oil, auto oil, and any other chemicals of quantity in shed. <p>corrections due <u>05/27/05</u></p>

FACILITY REP Wesley A Maffei
 TITLE Manager
 SIGNATURE Wesley A Maffei DATE 27 April 05

INSPECTOR Christopher J Arbore
 TITLE EHS II
 SIGNATURE Christopher J Arbore DATE 04/27/05



STORMWATER INSPECTION REPORT
 Napa County Department of Planning, Building, & Environmental Services
 1195 Third Street, Suite 210 • Napa, CA 94559 • Phone (707) 253-4471 • Fax
 (707) 253-4545
 www.countyofnapa.org

Facility Name: COUNTY OF NAPA: MOSQUITO ABATEMENT Facility No.: 4081 Date: 04/27/2005 Time In:
 Address: 3751 BROADWAY ST City: AMERICAN CANYON Inspector:
 Facility Representative: Phone: (707) 258-6044 Fax:
 Inspection Type: Routine
 Pre-announced: Yes No Pictures: Yes No

In = In compliance **Out** = Out of compliance **N/O** = Not observed **N/A** = Not applicable
COS = Corrected on-site **R** = Repeat

Category	Compliance				Type	Corrective Action
	In	Out	N/O	N/A		

Educational materials provided: _____

OBSERVATIONS AND CORRECTIVE ACTIONS

Additional Comments: _____

Inspected By: _____ Facility Representative: _____

Items marked OUT indicate the facility is NOT IN COMPLIANCE. A re-inspection may be conducted to confirm compliance with these requirements within the time frame specified above. If documentation of corrective action was requested, that documentation must be provided to the district inspector within the same time frame as noted above.

All checklist items above are enforceable by the local Stormwater Ordinances:
 Napa County: Ordinance 1240, Chapter 16.28 -City of Napa: Ordinance No. O2004 4, Chapter 8.36-City of Calistoga: Ordinance No. 607, Chapter 19.05

STATE WATER RESOURCES CONTROL BOARD
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR NAPA COUNTY
CONTAINER TYPES: 1 2 3 4 5

(1)=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SLUFS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER

AMERICAN CANYON COUNTY WATER D
3751 BROADWAY STREET
AMERICAN CANYON CA 94589

II FACILITY

MAINTENANCE BUILDING, GASOLINE TOWNSHIP/RANGE/SECTION MAILING ADDRESS DEALER/FOREMAN/SUPERVISOR TYPE OF BUSINESS
3751 BROADWAY STREET CA 94589 3751 BROADWAY STREET AMERICAN CANYON CA 94589 ROBERT L. SCHMERIN III WATER DISTRICT
AMERICAN CANYON

CROSS STREET :
DONALDSON WAY

CA 94589

ROBERT L. SCHMERIN III

WATER DISTRICT

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: ROBERT L. SCHMERIN III

(707) 642-4478

NIGHT: ANSWERING SERVICE

(707) 642-4478

***** OWNER ASSIGNED CONTAINER NUMBER: 1-1983 ***** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 000003094001 *****

IV DESCRIPTION

A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG :
C. YEAR INSTALLED : 1983
D. CAPACITY (GALLONS) : 550
E. REPAIRS : LEAK IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE :
G. STORES : PRODUCT :
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

JS CONTAINER LOCATED ON A FARM I NO.

V CONTAINER CONSTRUCTION

A. THICKNESS: 10 GAUGE B. VAULTING: NON-VAULTED C. WALLING: SINGLE WRAPPED
D. MATERIAL : CARBON STEEL
E. LINING : UNCOATED
F. WRAPPING : TAR TAR OR ASHT

VI PIPING

A. UNDERGROUND PIPING :
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR: UNDERGROUND PIPING : SECTION

VII LEAK DETECTION

VISUAL STOCK INVENTORY

VIII CHEMICAL COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

Appendix I

HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR NAPA COUNTY

(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER

AMERICAN CANYON COUNTY WATER D
3751 BROADWAY STREET

AMERICAN CANYON CA 94589

II FACILITY

MAINTENANCE BUILDING, GASOLINE
3751 BROADWAY STREET
AMERICAN CANYON CA 94589

MAILING ADDRESS
TOWNSHIP/RANGE/SECTION

3751 BROADWAY STREET
AMERICAN CANYON CA 94589

DEALER/FOREMAN/SUPERVISOR
TELEPHONE

ROBERT L. SCHMERIN III
(707) 642-4478

TYPE OF BUSINESS
NO. OF CONTAINERS

WATER DISTRICT
1

CROSS STREET :
DONALDSON WAY

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: ROBERT L. SCHMERIN III

(707) 642-4478 NIGHT: ANSWERING SERVICE

(707) 642-4478

***** OWNER ASSIGNED CONTAINER NUMBER: 1-1983 ***** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000030394001 *****

IV DESCRIPTION

A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG :
C. YEAR INSTALLED : 1983
D. CAPACITY (GALLONS) : 550

E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION

A. THICKNESS: 10 GAUGE B. VAULTING: NON-VAULTED C. WALLING: SINGLE WRAPPED
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : TAR

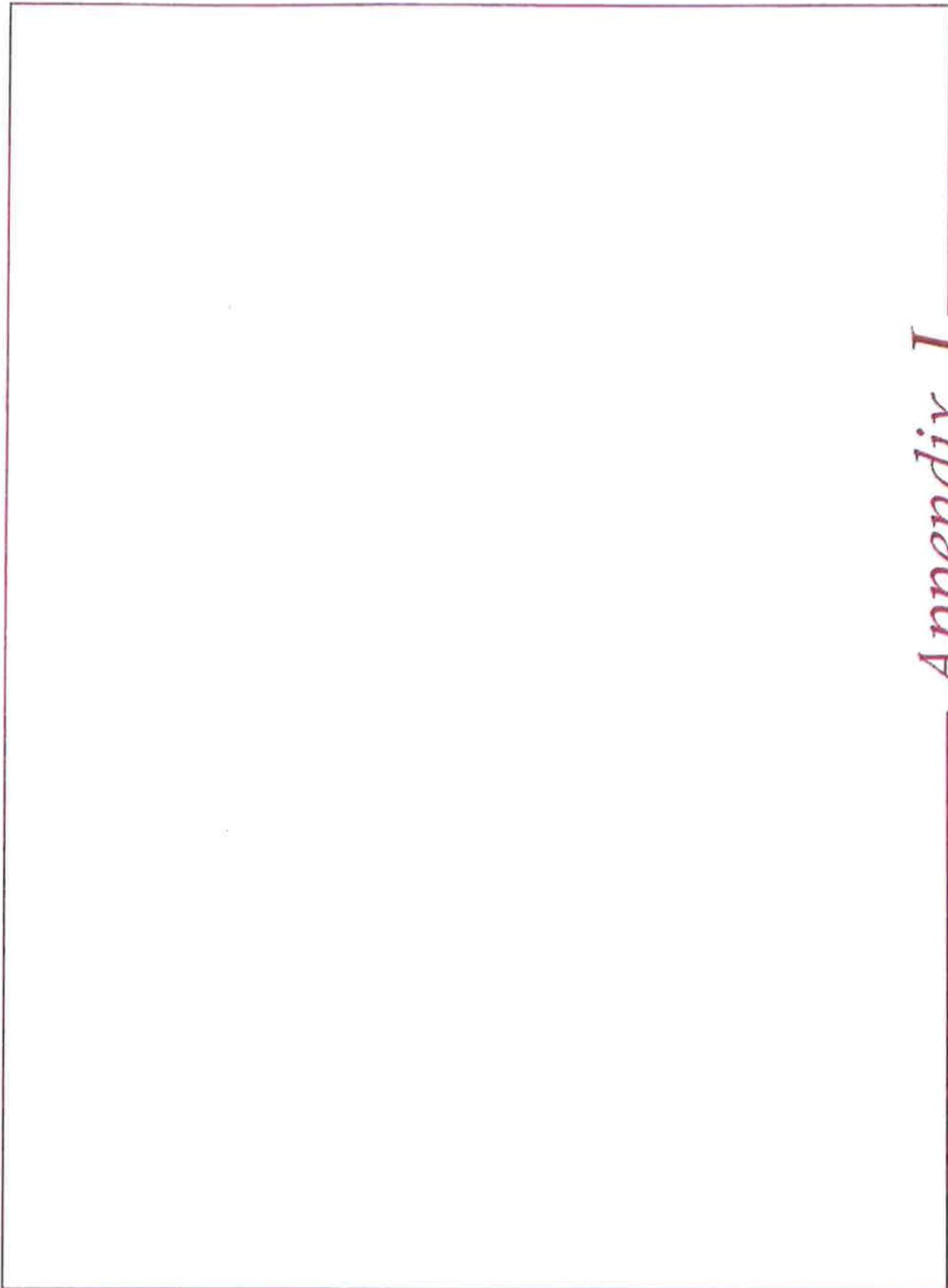
VI PIPING

A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION

VII LEAK DETECTION
VISUAL STOCK INVENTORY

VIII CHEMICAL COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

Appendix J



American Canyon Apartment Property

Broadway Street

American Canyon, CA 94503

Inquiry Number: 6021668.2s

March 24, 2020

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	70
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

BROADWAY STREET
AMERICAN CANYON, CA 94503

COORDINATES

Latitude (North): 38.1745160 - 38° 10' 28.25"
Longitude (West): 122.2547440 - 122° 15' 17.07"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 565278.2
UTM Y (Meters): 4225234.5
Elevation: 62 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5602106 CUTTINGS WHARF, CA
Version Date: 2012

East Map: 5602186 CORDELIA, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140608
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 BROADWAY STREET
 AMERICAN CANYON, CA 94503

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	D'AMBROSIO BROTHERS	3787 BROADWAY	HAZNET, HWTS	Higher	1 ft.
A2	MAINTENANCE BUILDING	3751 BROADWAY STREET	HIST UST	Higher	1 ft.
A3	1X AMERICAN CANYON C	3751 BROADWAY	HAZNET, HWTS	Higher	1 ft.
B4	NAPA COUNTY MOSQUITO	15 MELVIN RD	CERS HAZ WASTE, CERS	Higher	71, 0.013, SSW
B5	NAPA COUNTY MOSQUITO	15 MELVIN RD	RCRA NonGen / NLR	Higher	71, 0.013, SSW
C6	PALBY'S	3860 BROADWAY	LUST	Higher	537, 0.102, NNE
C7	PALBY'S (FORMERLY)	3860 BROADWAY	LUST	Higher	537, 0.102, NNE
C8	PALBY'S RESTAURANT	3860 BROADWAY ST.	UST	Higher	537, 0.102, NNE
9	WILSON WAY PROPERTY	142 WILSON WAY	LUST	Lower	590, 0.112, SW
C10	AMERICAN CANYON REDE	3915 BROADWAY ST	SWRCY	Lower	674, 0.128, North
D11	CAL TRANS	3466 BROADWAY ST	UST	Higher	783, 0.148, SSE
D12	CALTRANS ROUTE 29 PO	3466 BROADWAY	LUST, CHMIRS, CERS	Higher	783, 0.148, SSE
D13	NVC LAND, LLC	3466 BROADWAY	UST	Higher	783, 0.148, SSE
D14	NAPA VALLEY CASINO	3466 NAPA VALLEJO HW	UST	Higher	800, 0.152, SSE
D15	MIKE'S ARCO MINI MAR	3462 BROADWAY ST	RCRA NonGen / NLR	Higher	893, 0.169, SSE
D16	MIKE'S ARCO MINI MAR	3462 BROADWAY ST	UST	Higher	893, 0.169, SSE
D17	MIKE'S MINI MART & G	3462 NAPA VALLEJO HW	UST	Higher	893, 0.169, SSE
D18	MIKE'S ARCO MINI MAR	3462 BROADWAY ST	CERS HAZ WASTE, CERS TANKS, CERS	Higher	893, 0.169, SSE
D19	MIKE'S MINI MART & G	3462 BROADWAY ST	UST	Higher	893, 0.169, SSE
E20	GOLDEN STATE LUMBER,	150 S NAPA JUNCTION	UST	Higher	910, 0.172, NNE
E21	ADOBE LUMBER	150 S NAPA JUNCTION	RCRA NonGen / NLR	Higher	910, 0.172, NNE
E22	ADOBE LUMBER INC.	150 S NAPA JUNCTION	CERS HAZ WASTE, CERS	Higher	910, 0.172, NNE
F23	AMERICAN CANYON FIRE	225 JAMES RD	CERS HAZ WASTE, CERS TANKS, CERS	Lower	911, 0.173, SSW
F24		225 JAMES RD	RCRA NonGen / NLR	Lower	911, 0.173, SSW
F25	AMERICAN CANYON FIRE	225 JAMES ROAD	HIST UST, CHMIRS	Lower	911, 0.173, SSW
F26	AMERICAN CANYON FIRE	225 JAMES RD	AST	Lower	911, 0.173, SSW
27		9 DONALDSON WAY	RCRA NonGen / NLR	Lower	925, 0.175, South
D28	RICHS ARCO	3462 BROADWAY	HIST UST	Higher	952, 0.180, SSE
G29	CANYON MARKET	3460 BROADWAY	LUST	Higher	1090, 0.206, SSE
G30	BEACON	3438 BROADWAY	EMI, ENF, HIST CORTESE	Higher	1099, 0.208, SE
31	NORTHERN ABATEMENT C	3473 BROADWAY	RCRA NonGen / NLR, FINDS, ECHO	Lower	1271, 0.241, SSE
32	AMERICAN CANYON ELEM	AMERICAN CANYON ROAD	ENVIROSTOR, SCH	Higher	3792, 0.718, SE
33	CANYON CROSSINGS	NAPA JUNCTION ROAD	ENVIROSTOR, VCP	Higher	4502, 0.853, North

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program

EXECUTIVE SUMMARY

CDL..... Clandestine Drug Labs
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register
PFAS..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites

EXECUTIVE SUMMARY

US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
HWTS.....	Hazardous Waste Tracking System
MINES MRDS.....	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
-------------	--

EXECUTIVE SUMMARY

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/28/2019 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>AMERICAN CANYON ELEM</i> Facility Id: 28010003 Status: No Action Required	<i>AMERICAN CANYON ROAD</i>	<i>SE 1/2 - 1 (0.718 mi.)</i>	<i>32</i>	<i>64</i>
<i>CANYON CROSSINGS</i> Facility Id: 60002585 Status: Active	<i>NAPA JUNCTION ROAD</i>	<i>N 1/2 - 1 (0.853 mi.)</i>	<i>33</i>	<i>67</i>

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within

EXECUTIVE SUMMARY

approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PALBY'S Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Closed Permit ID: 248536	3860 BROADWAY	NNE 0 - 1/8 (0.102 mi.)	C6	17
PALBY'S (FORMERLY) Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Closed Permit ID: 9954	3860 BROADWAY	NNE 0 - 1/8 (0.102 mi.)	C7	17
CALTRANS ROUTE 29 PO Database: LUST, Date of Government Version: 12/09/2019 Status: Completed - Case Closed Global Id: T10000004917	3466 BROADWAY	SSE 1/8 - 1/4 (0.148 mi.)	D12	19
CANYON MARKET Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Open Permit ID: 248436	3460 BROADWAY	SSE 1/8 - 1/4 (0.206 mi.)	G29	60
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WILSON WAY PROPERTY Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Closed Permit ID: 248437	142 WILSON WAY	SW 0 - 1/8 (0.112 mi.)	9	18

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 8 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PALBY'S RESTAURANT Database: NAPA CO. UST, Date of Government Version: 09/05/2019 Facility Id: NAPA0727	3860 BROADWAY ST.	NNE 0 - 1/8 (0.102 mi.)	C8	18
CAL TRANS Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3466 BROADWAY ST	SSE 1/8 - 1/4 (0.148 mi.)	D11	19
NVC LAND, LLC Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3466 BROADWAY	SSE 1/8 - 1/4 (0.148 mi.)	D13	25
NAPA VALLEY CASINO Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3466 NAPA VALLEJO HW	SSE 1/8 - 1/4 (0.152 mi.)	D14	26
MIKE'S ARCO MINI MAR Database: UST, Date of Government Version: 12/09/2019 Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3462 BROADWAY ST	SSE 1/8 - 1/4 (0.169 mi.)	D16	28
MIKE'S MINI MART & G Database: UST, Date of Government Version: 12/09/2019 Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3462 NAPA VALLEJO HW	SSE 1/8 - 1/4 (0.169 mi.)	D17	30

EXECUTIVE SUMMARY

Facility Id: NAPA0185
Facility Id: NAPA0185

MIKE'S MINI MART & G Database: NAPA CO. UST, Date of Government Version: 09/05/2019	3462 BROADWAY ST	SSE 1/8 - 1/4 (0.169 mi.)	D19	40
GOLDEN STATE LUMBER, Database: NAPA CO. UST, Date of Government Version: 09/05/2019 Facility Id: NAPA0340	150 S NAPA JUNCTION	NNE 1/8 - 1/4 (0.172 mi.)	E20	41

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN CANYON FIRE Database: AST, Date of Government Version: 07/06/2016	225 JAMES RD	SSW 1/8 - 1/4 (0.173 mi.)	F26	57

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 12/09/2019 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN CANYON REDE Cert Id: RC216208.001	3915 BROADWAY ST	N 1/8 - 1/4 (0.128 mi.)	C10	18

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/21/2019 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NAPA COUNTY MOSQUITO	15 MELVIN RD	SSW 0 - 1/8 (0.013 mi.)	B4	13
MIKE'S ARCO MINI MAR	3462 BROADWAY ST	SSE 1/8 - 1/4 (0.169 mi.)	D18	30
ADOBE LUMBER INC.	150 S NAPA JUNCTION	NNE 1/8 - 1/4 (0.172 mi.)	E22	43
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN CANYON FIRE	225 JAMES RD	SSW 1/8 - 1/4 (0.173 mi.)	F23	48

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MAINTENANCE BUILDING Facility Id: 00000030394	3751 BROADWAY STREET	0 - 1/8 (0.000 mi.)	A2	10
RICHS ARCO Facility Id: 00000032442	3462 BROADWAY	SSE 1/8 - 1/4 (0.180 mi.)	D28	59
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN CANYON FIRE Facility Id: 00000028676	225 JAMES ROAD	SSW 1/8 - 1/4 (0.173 mi.)	F25	55

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/21/2019 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MIKE'S ARCO MINI MAR	3462 BROADWAY ST	SSE 1/8 - 1/4 (0.169 mi.)	D18	30
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN CANYON FIRE	225 JAMES RD	SSW 1/8 - 1/4 (0.173 mi.)	F23	48

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

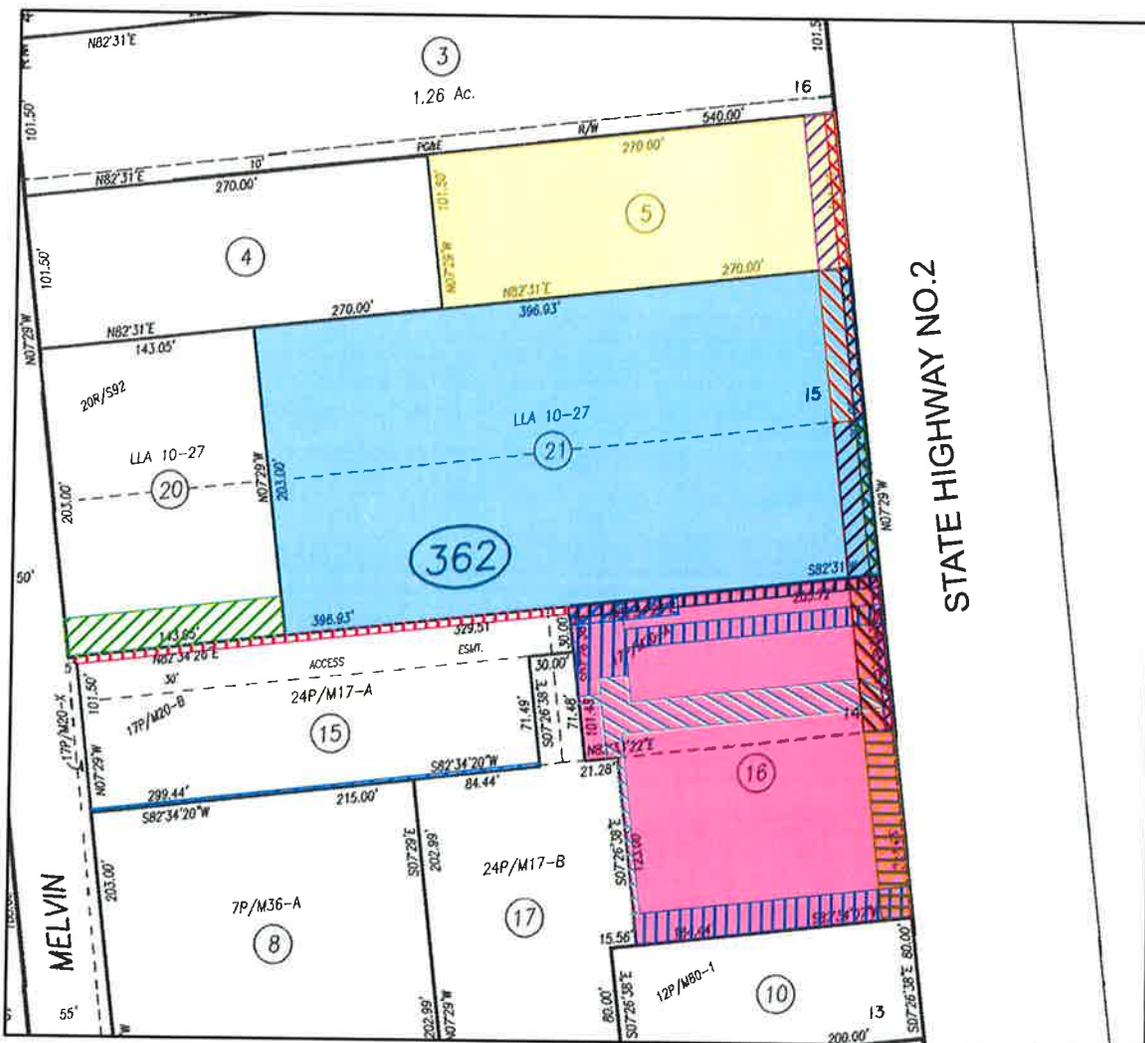
A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/16/2019 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NAPA COUNTY MOSQUITO EPA ID:: CAL000389869	15 MELVIN RD	SSW 0 - 1/8 (0.013 mi.)	B5	16
MIKE'S ARCO MINI MAR EPA ID:: CAL000403916	3462 BROADWAY ST	SSE 1/8 - 1/4 (0.169 mi.)	D15	26
ADOBE LUMBER	150 S NAPA JUNCTION	NNE 1/8 - 1/4 (0.172 mi.)	E21	41





Scale 1 inch = 78.86 feet



Legend

- TRACT ONE - Property In Question, Fee
- TRACT TWO - PARCEL 1 - Property In Question, Fee
- TRACT TWO - PARCEL 2 - Easement
- TRACT THREE - PARCEL ONE - Property In Question, Fee
- TRACT THREE - PARCEL TWO - Easement
- TRACT THREE - PARCEL THREE - Easement
- Item No. 15 - Easement for Pipe Line, Ingress & Egress In Bk387 Pg232 of Official Records
The exact location of the easement cannot be determined and is not plottable
- Item No. 16 - Easement for Pipe Line, Ingress & Egress In Bk390 Pg356 of Official Records
Affects said portion as described in the document
- Item No. 17 - Easement for Pipe Line, Ingress & Egress In 10/20/1952 Bk399 Pg16 of Official Records
Affects said portion as described in the document
- Item No. 18 - Easement for Pipe Line, Ingress & Egress In 10/20/1952 Bk399 Pg18 of Official Records
Affects said portion as described in the document
- Item No. 19 - Easement for Pipe Line, Ingress & Egress In 10/20/1952 Bk399 Pg20 of Official Records
Affects said portion as described in the document
- Item No. 20 - Easement for Sewer Pipe In 06/07/1965 Bk724 Pg315 of Official Records
Affects said portion as described in the document
- Item No. 21 - Easement for Sewer Pipe In 06/07/1965 Bk724 Pg317 of Official Records
Affects said portion as described in the document
- Item No. 22 - Easement for Sewer Pipe In 06/07/1965 Bk724 Pg319 of Official Records
Affects said portion as described in the document
- Item No. 23 - Easement for Sewer Pipe In Bk724 Pg321 of Official Records
Affects said portion as described in the document
- Item No. 24 - Easement for Sewer Pipe In Bk746 Pg925 of Official Records
Affects said portion as described in the document
- Item No. 25 - Easement for Public Water Lines In 08/24/1987 Inst # 24660 Bk1535 Pg451 of Official Records
Affects said portion as described in the document
- Item No. 28 - Easement for Utilities, Ingress & Egress In 07/21/1999 Inst # 21148 Bk1671 Pg181 of Official Records
Affects said portion as described in the document
- Item No. 29 - Easement for Underground Electrical In Bk17 Pg20 of Parcel Map
Affects said portion as shown on the map
- Item No. 31 - Easement for Waterlines In Bk24 Pg17 of Parcel Map
Affects said portion as shown on the map
- Item No. 31 - Easement for Utilities In Bk24 Pg17 of Parcel Map
Affects said portion as shown on the map
- Item No. 32 - Easement for Utilities, Ingress & Egress In 04/28/2004 Inst # 2004-17062 of Official Records
Affects said portion as described in the document

©2019
Fidelity National Title Company
 10969 Trade Center Drive, Suite 107
 Rancho Cordova, CA 95670

Title Order No. : FSNX-TO1902007N, Preliminary Report dated December 2, 2019

Drawing Date : 12/20/2019 - FNFI

Reference :

Assessor's Parcel No. : 058-362-005, 021& 016

Property : APNs: 058-362-005-000; 058-362-021-000 and 058-362-016-000 (Vacant Land), American Canyon, CA

Data :

This map/plot is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Plat Showing : A PORTION OF LAND IS SITUATED IN THE CITY OF AMERICAN CANYON, COUNTY OF NAPA, STATE OF CALIFORNIA

Sheet
1 of 1
Archive #

APPENDIX C: REGULATORY DATABASE REPORT

From: Vela.Monet@OEHHA
To: [HUD FOIAS](#)
Subject: RE: DEQ Request- 3805 Broadway
Date: Friday, June 18, 2021 8:40:17 PM

The Office of Environmental Health Hazard Assessment does not have records.

From: HUD FOIAS <hudfoias@partneresi.com>
Sent: Thursday, June 17, 2021 8:36 AM
To: Oehha PRAS <OEHHA.PRAs@oehha.ca.gov>
Cc: Roye, Jovianne <jroye@partneresi.com>
Subject: DEQ Request- 3805 Broadway

EXTERNAL:

Good morning!

Partner Engineering and Science, Inc. is conducting a Phase I Environmental Site Assessment and/or a Property Condition Report Assessment on the following property:

3805 Broadway
American Canyon, CA, 95403
Partner Project No. 21-323875.1

As part of the investigation, we are requesting informally any and all records you have for the above-referenced property pertaining to the following:

- Current or historical use of hazardous materials and/or hazardous waste
- Groundwater monitoring wells
- Current or historical clarifiers, oil/water separators, grease traps, interceptors
- Incidents of lead or asbestos, fires, leaks [USTs/ASTs] and spills
- *Code Violations or Notices to Comply*

Please forward any records that exist for the aforementioned property or any other pertinent information, at your earliest convenience. Also, please notify Partner if there are any costs associated with this request prior to processing.

Thanks!

Sarah Burdhimo
Business Services Coordinator
FHA|HUD Services

PARTNER ENGINEERING AND SCIENCE, INC.

611 Industrial Way West, Suite A, Eatontown, NJ 07724

Office: x3928 | Direct: 856-334-1514 |

More Than Just Assessments. *Solutions* – For a complete list of services, [click here](#)

From: [County of Napa Public Records](#)
To: [HUD FOIAS](#)
Subject: Your County of Napa public records request #21-278 has been closed.
Date: Thursday, June 17, 2021 1:25:42 PM

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

County of Napa Public Records

**Record request #21-278 has been closed.
The closure reason supplied was:**

Napa County does not possess or maintain the records you seek as the custodian of those records, because the City of Calistoga is the custodian of these records. To obtain any releasable records responsive to your request, you must submit your request to the City of American Canyon. You can contact the City of American Canyon at: <http://www.cityofamericancanyon.org>

Because Napa County does not possess or maintain the records responsive to your request, we have closed your request.

[View Request 21-278](#)

<https://countyofnapa.nextrequest.com/requests/21-278>



POWERED BY NEXTREQUEST

The All in One Records Requests Platform

Questions about your request? Reply to this email or sign in to contact staff at County of Napa.

Technical support: See our [help page](#)

Reference No: R001300-061721

Logged in as: hudfoias@partneresi.com

Thank you for your interest in public records of CAL FIRE. Your request has been received and is being processed in accordance with the California Public Records Act, Government Code section 6250 et seq. Your request was received on June 17, 2021 and given the reference number R001300-061721 for tracking purposes.

Record(s) Requested:

Partner Engineering and Science, Inc. is conducting a Phase I Environmental Site Assessment and/or a Property Condition Report Assessment on the following property: 3805 Broadway American Canyon, CA, 95403 Partner Project No. 21-323875.1 As part of the investigation, we are requesting informally any and all records you have for the above-referenced property pertaining to the following: • Records pertaining to underground and above ground storage tanks • Hazardous materials incidents • Inspection records • Any outstanding violations We are especially looking to learn if there are any open fire code violations and to obtain the results of the last inspection by the fire department. If there are no open fire code violations, please include the statement: There are No open fire code violations for this property. Please forward any records that exist for the aforementioned property or any other pertinent information, at your earliest convenience. Also, please notify Partner if there are any costs associated with this request prior to processing.

Your request will be forwarded to the relevant CAL FIRE department(s) to locate the information you seek and to determine the volume and any costs that may be associated with satisfying your request. You will be contacted about the availability and/or provided with copies of the records in question. PLEASE NOTE: The California Public Records Act does not require a governmental body to create new information, to do legal research, or to answer questions.

You can monitor the progress of your request in "[My Request Center](#)" and you'll receive an email when your request has been completed.

Partner Engineering and Science, Inc. is conducting a Phase I Environmental Site Assessment and/or a Property Condition Report Assessment on the following property:

3805 Broadway

American Canyon, CA, 95403

Partner Project No. 21-323875.1

As part of the investigation, we are requesting any zoning, building, fire, or environmental health records you have for the above-referenced property pertaining to the following:

- current zoning designation, if the current use is permitted, and conditional uses (if any) If there are no open zoning code violations, please include the statement: There are No open zoning code violations for this property.
- any unresolved notices of violation/to comply, date of last inspection by the building department, copies of any open building department permits, copies of certificates of occupancy, copies of permits and records for any current or historic storage tanks If there are no open building code violations, please include the statement: There are No open building code violations for this property.
- hazardous materials incidents, fire inspection records, outstanding fire code violations -- We are especially looking to learn if there are any open fire code violations and to obtain the results of the last inspection by the fire department. If there are no open fire code violations, please include the statement: There are No open fire code violations for this property.
- records of asbestos or lead-based paint, septic system and water well information, human health concerns

Scherr, Katie

From: Public Records <PublicRecords@baaqmd.gov>
Sent: Wednesday, June 9, 2021 2:58 PM
To: Scherr, Katie
Subject: Public Records Request No. 2021-06-0118

Dear Katie Scherr,

Thank you for your request. We have searched our records and have no records that respond to your below request for:

3805 Broadway
American Canyon

If you have any questions or concerns, please call or e-mail me.

Sincerely,

Rochele Henderson
Public Records Section
BAAQMD
415-516-1916

Scherr, Katie

From: Martha Banelos <mbanuelos@amcanfire.com>
Sent: Thursday, June 10, 2021 9:26 AM
To: Scherr, Katie
Subject: RE: Public Record Request

Good morning Katie,

The Fire District does not have any records on the property located at 3805 Broadway. For information on Hazardous materials, storage tanks, and other related information, please contact Napa County Environmental.

Thank you,

Martha Banelos | Fire Executive Assistant/Office Administrator
American Canyon Fire Protection District
911 Donaldson Way East | American Canyon, CA. 94503
☎ 707.551.0653 | 📠 707.638.3511 | ✉ mbanuelos@amcanfire.com
[Internet](#) | [Facebook](#)



From: Scherr, Katie <kscherr@partneresi.com>
Sent: Wednesday, June 9, 2021 7:50 AM
To: Martha Banelos <mbanuelos@amcanfire.com>
Subject: [External] Public Record Request

Good Morning Ms. Banelos,

Partner Engineering and Science, Inc. is performing a Phase 1 ESA for the below property. I would like to request any records regarding underground storage tanks (USTs), hazardous material generation, storage, or usage, reported releases, violations, or the presence of dry cleaning machines or AULs, or any other related record, as far back as records go.

The request is for the following address:

3805 Broadway
American Canyon, California 95403

APNs: 058-362-005; 058-362-021; 058-362-016

Please feel free to reach out with any additional questions or concerns. Thank you!

Katie Scherr
Staff Scientist

PARTNER ENGINEERING AND SCIENCE, INC.

1544 Eureka Rd., Suite 180, Roseville, CA 95661

T: 916-223-2513 | C: 916-458-1098

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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/>

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Scherr, Katie

From: Cherri Walton <cw Walton@cityofamericancanyon.org>
Sent: Tuesday, June 29, 2021 10:54 AM
To: Scherr, Katie
Subject: Public Records Request

Hi Katie,

The City Clerk's Office has determined that your Public Records Request has been completed. The City does not have any records related to the documents you requested.

Should you have any questions regarding your request, please do not hesitate to contact me.

Sincerely,

Cherri S. Walton, CMC, Acting City Clerk

City Clerk's Department

City of American Canyon | 4381 Broadway Street, Suite 201 | American Canyon, CA 94503

707 647 5337 | [Cwalton@cityofamericancanyon.org](mailto:cwalton@cityofamericancanyon.org)

www.cityofamericancanyon.org | www.facebook.com/CityofAmericanCanyon

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[Sign up now for the City Manager's Friday Update.](#)

Coronavirus (COVID-19) Update – City Offices Closed, Staff Still At Work

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<https://www.cityofamericancanyon.org/>

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Environmental

Cover Sheet

APN	058 - 362 - 016 - 000
Permit #	
Program	Well
DocType	pmt
Street #	1351
Street Name	Broadway
Year	2004



DATE 5/18/04
 FEE \$25.00
 RECEIPT NO. 34789
 BY [Signature]



NAPA COUNTY DEPARTMENT
 OF ENVIRONMENTAL MANAGEMENT
 APPLICATION & PERMIT TO
 CONSTRUCT A WATER WELL

APN 58-362-010
 JOB # 96-12671
 ISSUE DATE 5/18/04
 EXPIR. DATE 5/18/06

OWNER City of American Canyon CONTRACTOR Oakville Pump Serv.
 ADDRESS State Hwy ADDRESS #1 Walnut Oakville Ca.
 OWNER'S PHONE 647-4365 PHONE 944-2471

TYPE OF WORK	() CLASS IA () CLASS IB () CLASS II () HORIZONTAL WELL () WELL RECONSTRUCTION () WELL DEEPENING (X) DESTRUCTION: () HIGH HAZARD () LOW HAZARD () LARGE DIAMETER
PROPOSED USE	WELL TO SERVE THIS PARCEL ONLY () YES () NO. IF NO, LIST OTHER PARCELS (APN's) TO BE SERVED BY THIS WELL () PRIVATE DOMESTIC () INDUSTRIAL () AGRICULTURAL () GEOTHERMAL (D.O.G. APPROVAL) () PUBLIC DOMESTIC: NAME OF PUBLIC WATER SYSTEM _____
SPECIFICATIONS	CASING DIAMETER _____ in. BORING DIAMETER _____ in. SEAL RADIUS _____ in. MINIMUM ANNULAR SEAL DEPTH _____ ft. (or to first impervious layer) SEALING MATERIAL _____ METHOD (TREMIE, ETC.) _____ SETBACKS: ALL SEPTIC TANKS _____ ALL DISPOSAL FIELDS _____ HAZ-MAT SITE <u>SEE</u> PROPERTY LINE _____ ROADS _____ SEWER LINE _____ <u>ATTACHED PBL. FM S.C.</u>

WORKER'S COMPENSATION COVERAGE: (Check one of the following)

- (X) A certificate of current Worker's Comp. Insurance coverage is on file with this office (or being filed with this application).
- () I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California

TERMS OF PERMIT:

1. Call at least 24 hours in advance during normal business hours, to schedule inspection requests (no voice messages). You must confirm with the district inspector between 8:00 and 9:00AM the day of the inspection, or the request may be denied.
2. Prior to receiving final clearance on the well, a copy of the State of California Well Completion Report (DWR 188) must be returned to this department.
3. This permit shall expire two (2) years from the date of issuance.
4. Permits are issued only to licensed well drillers. Copy of Well Driller's license (C-57) must be on file with this Dept.
5. If a claim is to be submitted for a refund, this request must be processed within one year of the date on the receipt.

CONDITIONS/REMARKS: This is a well ABANDONMENT
10' DEEP STEEL CASE WELL, FILL WITH CONCRETE TO TOP.

I, the undersigned, hereby agree to comply with all laws and regulations of the County of Napa and the State of California pertaining to water well construction. I also agree to comply with the terms of this permit and declare that the information submitted on this Application is correct.

[Signature] Signature of Licensed Well Driller 5/18/04 Date

	Date	By	Remarks
City Clearance			
Public Works Clearance			
Pre-Inspection			
Class II approval			
Permit issued	5/18/04	DL	
Construction inspection	5/20/04	SS	
Well log received	6/29/04	JP	casing cut 3-5' long. Well ill 7' from base of cut casing to bottom of well. Filled with concrete

Environmental

Cover Sheet

APN	050 362 -016 -000
Permit #	
Program	Well
DocType	WL
Street #	1351
Street Name	Broad Way
Year	2004



ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

Page 1 of 1
 Owner's Well No. N/A No. e014473
 Date Work Began MAY 18, 2004, Ended MAY 21, 2004
 Local Permit Agency County of NAPA Env Health
 Permit No. 96-12671 Permit Date 5/18/04

GEOLOGIC LOG

DEPTH FROM SURFACE		DESCRIPTION
Fl.	to Fl.	
0	5	REMOVE PIPE & ASSEMBLY FROM WELL
5	12	3X3 CONCRETE/GROUT PLUG - FILL WITH CONCRETE GROUT S&C

WELL OWNER

Name: _____
 Mailing Address: _____
 CITY _____ STATE _____ ZIP _____

WELL LOCATION

Address 1351 BROADWAY (HWY 29)
 City CITY OF AMERICAN CANYON
 County NAPA
 APN Book 058 Page 362 Parcel 016
 Township _____ Range _____ Section _____
 Latitude _____ NORTH Longitude _____ WEST

ORIENTATION () _____ VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)
 DRILLING METHOD _____ FLUID _____

LOCATION SKETCH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

ACTIVITY ()

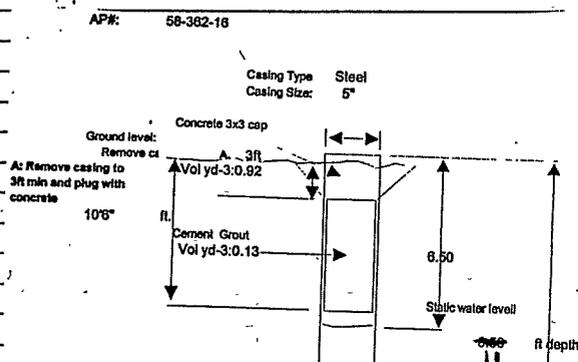
NEW WELL _____
 MODIFICATION/REPAIR
 Deepen
 Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES ()

WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING _____
 TEST WELL _____
 CATHODIC PROTECTION _____
 HEAT EXCHANGE _____
 DIRECT PUSH _____
 INJECTION _____
 VAPOR EXTRACTION _____
 SPARGING _____
 REMEDIATION _____
 OTHER (SPECIFY) _____



RECEIVED
JUN 29 2004
 DEPT. OF ENVIRONMENTAL MANAGEMENT

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Fl.) BELOW SURFACE
 DEPTH OF STATIC WATER LEVEL _____ (Fl.) & DATE MEASURED _____
 ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____
 TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Fl.)
 * May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING _____ (Feet)
 TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	ANNULAR MATERIAL			
		TYPE ()								CE-MENT ()	BEN-TONITE ()	FILL ()	FILTER PACK (TYPE/SIZE)
Fl.	to Fl.	BLANK	SCREEN	CON-DUCTOR	FILL PIPE								

ATTACHMENTS ()

Geologic Log _____
 Well Construction Diagram _____
 Geophysical Log(s) _____
 Soil/Water Chemical Analyses _____
 Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME OAKVILLE Pump Service Roger L. Letz
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS #1 WALNUT CITY OAKVILLE STATE CA. ZIP 94722

Signed _____ DATE SIGNED Jun 28, 04 C-57 LICENSE NUMBER 744958

WELL DRILLER/AUTHORIZED REPRESENTATIVE

Environmental

Cover Sheet

APN	050 362 -016 -000
Permit #	
Program	Well
DocType	WL
Street #	1351
Street Name	Broad Way
Year	2004



ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

Page 1 of 1
 Owner's Well No. N/A No. e014473
 Date Work Began MAY 18, 2004, Ended MAY 21, 2004
 Local Permit Agency County of NAPA Env Health
 Permit No. 96-12671 Permit Date 5/18/04

GEOLOGIC LOG

DEPTH FROM SURFACE		DESCRIPTION
Fl.	to Fl.	
0	5	REMOVE PIPE & ASSEMBLY FROM WELL
5	12	3X3 CONCRETE/GROUT PLUG - FILL WITH CONCRETE GROUT S&C

WELL OWNER

Name: _____
 Mailing Address: _____
 CITY _____ STATE _____ ZIP _____

WELL LOCATION

Address 1351 BROADWAY (HWY 29)
 City CITY OF AMERICAN CANYON
 County NAPA
 APN Book 058 Page 362 Parcel 016
 Township _____ Range _____ Section _____
 Latitude _____ NORTH Longitude _____ WEST

ORIENTATION () _____ VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)
 DRILLING METHOD _____ FLUID _____

LOCATION SKETCH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

ACTIVITY ()

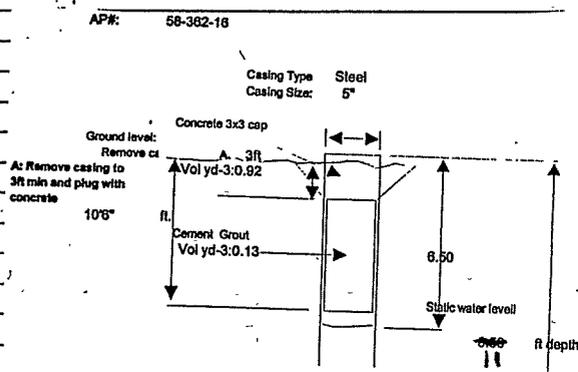
NEW WELL _____
 MODIFICATION/REPAIR
 Deepen
 Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES ()

WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING _____
 TEST WELL _____
 CATHODIC PROTECTION _____
 HEAT EXCHANGE _____
 DIRECT PUSH _____
 INJECTION _____
 VAPOR EXTRACTION _____
 SPARGING _____
 REMEDIATION _____
 OTHER (SPECIFY) _____



RECEIVED
JUN 29 2004
 DEPT. OF ENVIRONMENTAL MANAGEMENT

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Fl.) BELOW SURFACE
 DEPTH OF STATIC WATER LEVEL _____ (Fl.) & DATE MEASURED _____
 ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____
 TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Fl.)
 * May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING _____ (Feet)
 TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)					ANNULAR MATERIAL TYPE
		TYPE ()	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
Fl. to Fl.		BLANK SCREEN CONDUCTOR FILL PIPE					CE-MENT BEN-TONITE FILL FILTER PACK (TYPE/SIZE)

ATTACHMENTS ()

Geologic Log _____
 Well Construction Diagram _____
 Geophysical Log(s) _____
 Soil/Water Chemical Analyses _____
 Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME OAKVILLE Pump Service Roger L. Letz
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS #1 WALNUT CITY OAKVILLE STATE CA. ZIP 94722

Signed _____ DATE SIGNED Jun 28, 04 C-57 LICENSE NUMBER 744958

WELL DRILLER/AUTHORIZED REPRESENTATIVE

Environmental

Cover Sheet

APN	058 - 362 - 016 - 000
Permit #	
Program	Well
DocType	pmt
Street #	1351
Street Name	Broadway
Year	2004



DATE 5/18/04
 FEE \$25.00
 RECEIPT NO. 34789
 BY [Signature]



NAPA COUNTY DEPARTMENT
 OF ENVIRONMENTAL MANAGEMENT
 APPLICATION & PERMIT TO
 CONSTRUCT A WATER WELL

APN 58-362-010
 JOB # 96-12671
 ISSUE DATE 5/18/04
 EXPIR. DATE 5/18/06

OWNER City of American Canyon CONTRACTOR Oakville Pump Serv.
 ADDRESS State Hwy ADDRESS #1 Walnut Oakville Ca.
 OWNER'S PHONE 647-4365 PHONE 944-2471

TYPE OF WORK	() CLASS IA () CLASS IB () CLASS II () HORIZONTAL WELL () WELL RECONSTRUCTION () WELL DEEPENING (X) DESTRUCTION: () HIGH HAZARD () LOW HAZARD () LARGE DIAMETER
PROPOSED USE	WELL TO SERVE THIS PARCEL ONLY () YES () NO. IF NO, LIST OTHER PARCELS (APN's) TO BE SERVED BY THIS WELL () PRIVATE DOMESTIC () INDUSTRIAL () AGRICULTURAL () GEOTHERMAL (D.O.G. APPROVAL) () PUBLIC DOMESTIC: NAME OF PUBLIC WATER SYSTEM _____
SPECIFICATIONS	CASING DIAMETER _____ in. BORING DIAMETER _____ in. SEAL RADIUS _____ in. MINIMUM ANNULAR SEAL DEPTH _____ ft. (or to first impervious layer) SEALING MATERIAL _____ METHOD (TREMIE, ETC.) _____ SETBACKS: ALL SEPTIC TANKS _____ ALL DISPOSAL FIELDS _____ HAZ-MAT SITE <u>SEE</u> PROPERTY LINE _____ ROADS _____ SEWER LINE _____ <u>ATTACHED PBL. PM 5.C.</u>

WORKER'S COMPENSATION COVERAGE: (Check one of the following)

- (X) A certificate of current Worker's Comp. Insurance coverage is on file with this office (or being filed with this application).
- () I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California

TERMS OF PERMIT:

1. Call at least 24 hours in advance during normal business hours, to schedule inspection requests (no voice messages). You must confirm with the district inspector between 8:00 and 9:00AM the day of the inspection, or the request may be denied.
2. Prior to receiving final clearance on the well, a copy of the State of California Well Completion Report (DWR 188) must be returned to this department.
3. This permit shall expire two (2) years from the date of issuance.
4. Permits are issued only to licensed well drillers. Copy of Well Driller's license (C-57) must be on file with this Dept.
5. If a claim is to be submitted for a refund, this request must be processed within one year of the date on the receipt.

CONDITIONS/REMARKS: This is a well ABANDONMENT
10' DEEP STEEL CASE WELL, FILL WITH CONCRETE TO TOP.

I, the undersigned, hereby agree to comply with all laws and regulations of the County of Napa and the State of California pertaining to water well construction. I also agree to comply with the terms of this permit and declare that the information submitted on this Application is correct.

[Signature] Signature of Licensed Well Driller 5/18/04 Date

	Date	By	Remarks
City Clearance			
Public Works Clearance			
Pre-Inspection			
Class II approval			
Permit issued	5/18/04	DL	
Construction inspection	5/20/04	SS	
Well log received	6/29/04	JP	casing cut 3-5' long. Well ill 5' from base of cut casing to bottom of well. Filled with concrete

APPENDIX D: QUALIFICATIONS

Education

Oregon State University-Bachelor of Science in Environmental Science, Minor in Sustainability
B.S emphasis in Water Resources

Highlights

Bachelor of Environmental Science
Phase I Environmental Site Assessments
Transaction Screen Assessments
Environmental Desktop Reports

Experience Summary

Ms. Scherr is currently a Staff Scientist for Partner Engineering and Science, Inc (Partner). Duties include completing all aspects of Phase I Environmental Site Assessments; conducting historical research of project sites, regulatory research, site reconnaissance and interviews, and report writing. She will also be conducting Transaction Screen Assessments and Environmental Desktop Reports such as Records Search and Risk Assessments (RSRAs) and Desktop Reviews (DRs). Experience writing technical reports, interpersonal communication and attention to detail allow Ms. Scherr to adequately perform her duties.

Ms. Scherr has completed college courses in ecology, hydrogeology, soil science, technical writing, field data collection and analysis methods, as well as chemistry, physics, statistics and calculus. Ms. Scherr will use this experience to accurately conduct historical research, field reconnaissance, site interviews and report writing in a supporting role. Additional experience includes fieldwork in the coastal streams of Oregon, water sampling in the Willamette Valley, and laboratory work and data analysis for the Watershed Processes Lab at Oregon State University.

Project Experience

Fieldwork in the Oregon Coastal Range

Ms. Scherr worked with a PhD candidate in performing various research in the streams of the Oregon Coastal Range to determine the influence of rock lithology on stream metabolism in headwater stream systems. She studied topographic changes in various streams using a Survey Station to capture current topography and compare it with past topography. She also used a BenthloTorch to measure the number of bacteria on different sized rocks in the streams. In addition, she measured rock sizes at different topographic cross-sections of given streams. She assisted the PhD candidate in compiling and organizing the data, so it was clear and accurate.

Water Sampling in the Mary's River Watershed

Ms. Scherr assisted Professor Segura from the Oregon State College of Forestry in the collection of water isotope samples from various locations within a watershed located in the Willamette Valley. This work was for an ongoing research project by Dr. Segura. Ms. Scherr would go into the field once a week with sterile vials and collect a water sample from 12 different streams. She would make sure the sample was full, with no dirt or air bubbles. Some sampling required climbing down a hill or hiking through brush. Ms. Scherr than made sure the samples were brought back to the lab, correctly entered into the system, and stored properly.

Lab Work for the Watershed Processes Lab. Ms. Scherr worked as a laboratory aid for graduate students and PhD students in the Water Processes Lab at Oregon State University. Her work included combusting and preparing vials for fieldwork, downloading and analyzing data obtained from the field, and performing sedimentation filtration. Ms. Scherr had to be trained in lab and chemical safety, as well as proper laboratory procedure. She also was educated on each student's project to ensure accurate analysis of data.

Phase Freshwater Ecology Case Study. Ms. Scherr performed in an in-depth case study report for her final project in Freshwater Ecology, a senior water resources class. Ms. Scherr's case study was on the Stage 0 Restoration of Depositional Stream Reaches in Deer Creek, which is a part of the McKenzie River watershed in southern Oregon. The report consisted of interviews with Forest Service and other necessary personnel, a walk through of the site with Kate Meyers of the Forest Service, photographs of the site, research of historic pictures of the site, and a comparison of ecological data from before and after the restoration. Research was also done on the effects of Stage 0 restoration versus other forms of restoration, as well as stream morphology. Ms. Scherr presented the results in a presentation to her peers as well as other professors in the Department of Fisheries and Wildlife at Oregon State University.

Duck Pattern Sampling Project. Ms. Scherr designed and conducted her own field project for a Field Sampling class at Oregon State University. Her project was on the Impact of Standing Water on Migratory Duck Patterns in Jackson Frazier Wetland, located in Corvallis, Oregon. Ms. Scherr first had to determine what she wanted to survey and design an experiment based on that. Her experiment consisted of a research question, finding similar scholarly reports, a hypothesis, ten weeks of data collection, analyzing the results and creating figures, and coming up with a conclusion, while identifying sources of error. Ms. Scherr saw a positive correlation between the frequency of ducks and the amount of standing water present in the wetland.

Contact

kscherr@partneresi.com

916-223-2513

Education

B. A., Geology, Miami University, Oxford Ohio

Training

HAZWOPER 40 Hour and 8 Hour Refresher

American Heart Association First Aid CPR and AED certified

AHERA Building Inspector Certified with Annual Refresher Certifications

Highlights

7 years' experience performing Phase I Environmental Site Assessments for commercial and industrial facilities

7 Years' experience performing Environmental Desktop Reports

7 Years' experience performing Phase II Environmental Site Assessments

Experience Summary

Ms. Jastrab currently holds the role of Project Assessor with responsibilities including, but not limited to, performing Phase I Environmental Site Assessments per American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13) which include site inspections, regulatory review, historical research, file review, and technical writing.

Ms. Jastrab has completed extensive Phase I Environmental Site Assessments in her 7+ years of experience per American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13) as well as Ohio VAP Phase I Property Assessments.

Ms. Jastrab Phase II Environmental Site Assessment experience includes, but is not limited to, indoor air, groundwater, surface water, soil and soil gas sampling, hydrogeologic and subsurface investigations, oversight of monitoring well installations with hollow stem auger, sonic, and Geoprobe direct push drilling methods.

Additionally, Ms. Jastrab has created detailed GIS maps using ArcGIS 10.2.5 for various projects.

Project Experience

Phase I Environmental Site Assessments

Ms. Jastrab conducted Phase I Environmental Site Assessments of numerous commercial and industrial facilities over a 7-year period throughout California, Illinois, Indiana, Iowa, Kentucky, Maryland, Minnesota, Mississippi, Missouri, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota and Virginia as well as Ohio VAP Phase I Property Assessments.

Geotechnical Assessments

Former DOD Facility, Gainesville, Virginia. Ms. Jastrab was the Field Geologist/Manager and was responsible for a team of up to 6 employees, insuring completion of the project in a timely manner, health and safety protocols were met and sampling procedures were done in accordance to EPA guidelines.

Participated in large, low flow groundwater sampling events as the Field Manager where chemicals of concern are VOCs, ClO₄, RDX, PCBs, Metals and 1,4-Dioxane.

Participated in a Site Wide perchlorate surface sample event resulting in nearly one hundred soil borings which were screened, logged and described for soil type, moisture content, and other standard geological field characteristics.

Pharmaceutical Facility, Nutley, New Jersey. As the Field Geologist, Ms. Jastrab participated in numerous groundwater and sub-slab air sampling events. Groundwater sampling techniques included low flow as well as PDB sampling with regards to applicable regulatory standards. Summa Can sampling was utilized for the collection of sub-slab soil vapor data.

Large Petroleum Refinery, Illinois. As the Field Geologist, Ms. Jastrab participated in numerous events including excavation oversight and sampling of a PCE release; groundwater sampling with respect to the IEPA's TACO Program, RCRA CA Program, RCRA Permitting, IEPA correspondence and a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) for the Refinery which included the logging of dozens of borings.

Speaking

Science Lawyers Can Use: Soil and Groundwater Sampling Equipment and Techniques; Ohio State Bar Association, Columbus, Ohio. Ms. Jastrab created and delivered a presentation in person and via webcast regarding the up to date methods of soil and groundwater sampling commonly used during Phase II subsurface investigations.

Contact

jjastrab@partneresi.com

Education

M.S., Real Estate & Infrastructure, Johns Hopkins University – Carey Business School, Baltimore, MD.
B.A., Communication, University of Maryland, College Park, MD.
Dale Carnegie “Skills for Success” Course

Registrations

LEED Green Associate
Level I Infrared Thermographer

Highlights

18 years of experience in the environmental/engineering due diligence and construction industries
14 years of experience with FHA-insured, multi-family and healthcare related due diligence services
HUD MAP/LEAN, ASTM, Fannie Mae, Freddie Mac, and industrial hygienic property condition assessments

Experience Summary

Mr. Lephew’s experience spans 18 years in the environmental, engineering, and construction industries. He has significant experience in due diligence assessments for a variety of property types and the needs and requirements for a variety of reporting standards, including not only HUD standards, but also ASTM standards, Fannie Mae & Freddie Mac standards, and customized client formats. Specifically, Mr. Lephew has performed Facility Condition Assessments (FCAs), Project Capital Needs Assessments (PCNAs), Small Loan PCAs, Construction Progress Monitoring, Probable Maximum Loss assessments, Asbestos Surveys, Radon Studies, Mold Assessments, Cost Segregation Studies, and New Construction and/or Substantial Rehabilitation Architectural-Engineering/Cost Reviews.

Mr. Lephew spent the previous 14 years focused on physical inspections of properties nationally, as well as reviewing peer reports, for qualified industry leading lenders, specifically those specializing in HUD Multifamily (MAP) and Office of Residential Care (ORCF) facilities. Mr. Lephew is additionally responsible for insuring technical compliance with the published guidelines and manuals, accessibility standards, and reporting practices for FHA-insured loans.

As the Technical Director for HUD Services, Mr. Lephew is the primary knowledge resource to clients, as well as internal staff, for all HUD related due diligence services, including both environmental and physical needs assessments. The HUD related due diligence programs that Mr. Lephew specializes in include: Multifamily Accelerated Processing (MAP), LEAN-Office of Residential Care (ORCF), Architectural & Engineering/Cost Reviews (AEC), Low-Income Housing Tax Credits (LIHTC), Rental Assistance Demonstration (RAD), and Permits & Approvals (P&A).

Mr. Lephew has extensive knowledge in, and has facilitated compliance with, local and state accessibility standards and laws, as well as Federal standards such as the American with Disabilities Act (ADA), the Fair Housing Act (FHA), and Section 504-Uniform Federal Accessibility Standards (UFAS) requirements, as they pertain to commercial and multi-family residential building standards and practices.

These concentric experiences have led to Mr. Lephew's expanded knowledge of many forms of real estate due diligence, beyond just FHA-insured loans. Finally, Mr. Lephew's diversity across residential, industrial, municipal, and commercial environments is a major contribution to Partner Engineering and Science's national team.

Project Experience

Veterans of America Portfolio (6 sites), Texas. HUD MAP 223(f) Heavy refinance of six existing multi-family residential properties. Included Intrusive Capital Needs Assessments (CNA w/ e-Tool), Accessibility Standards and Document and Cost Reviews, Phase I Environmental Site Assessments (ESA)

Timber Sound, Orlando, Florida. HUD MAP 223(f) Heavy refinance of existing multi-family residential. Included Intrusive Capital Needs Assessment (CNA w/ e-Tool), Accessibility Standards and Document and Cost Reviews, Phase I Environmental Site Assessments (ESA) and a Modified 8-Step Decision Making Process.

Villa Victoria, Newark, New Jersey. HUD MAP 223(f) Heavy refinance of existing multi-family residential. Included Intrusive Capital Needs Assessment (CNA w/ e-Tool), Level II ASHRAE Energy Audit, Accessibility Standards and Document and Cost Review, Phase I Environmental Site Assessment (ESA), and a Low-Income Housing Tax Credit (LIHTC) application.

Villa Nueva, San Diego, California. HUD MAP 223(f) refinance of existing multi-family residential. Included Intrusive Capital Needs Assessment (CNA w/ e-Tool), Accessibility Standards Reviews, California Tax Credit Allocation Committee (TCAC) application, Phase I Environmental Site Assessment (ESA), and Radon Sampling/Mitigation Assessment.

Case Del Sol, Pueblo, Colorado. HUD Rental Assistance Demonstration (RAD) conversion of existing affordable housing to long-term Section 8 financing. Included a Level II ASHRAE Energy Audit and Intrusive Capital Needs Assessment (CNA w/ e-Tool).

NEXT Healthcare Facilities Portfolio, 15 Locations throughout Eastern US. Project Capital Needs Assessments (PCNA) and Phase I Environmental Site Assessments (ESA) for 15 unique healthcare facilities, which will be converted to FHA-financing via a HUD bridge loan.

Speaking & Publication

Mr. Lephew has sat on numerous panels at local HUD hub offices, and for industry leading lenders at Annual/Regional Conferences. Discussions focused on HUD Multifamily (MAP) programs, changes in guidance, and lending/underwriting trends and practices, such as accessibility standards and the HUD MAP Guide/CNA e-Tool.

For the past several years, Mr. Lephew has been an instructor for the Mortgage Bankers Associations (MBA) annual Underwriter training course, which takes place January-June of each year.

Joseph R. Lephew

Mr. Lephew has also contributed to blogs and digital media posts, specifically for Globe Street, and related to discussing, analyzing and reviewing topics related to HUD Multifamily (MAP), LEAN-Office of Residential Care (ORCF), and Rental Assistance Demonstration (RAD) lending processes and trends.

Lastly, Mr. Lephew also serves as the Co-Captain on the Mortgage Bankers Association (MBA) Technical Committee, as a liaison to HUD for third party vendors. This role requires Mr. Lephew to consult and participate in changes/updates to guidance and protocols directly related to HUD underwriting standards and third party practices as it pertains to FHA-insured mortgages.

Contact

jlephew@partneresi.com

Appendix I – Phase II Environmental Site Assessment



December 7, 2021

LIMITED PHASE II SUBSURFACE INVESTIGATION

Property Identification:

American Canyon Apartments Property
American Canyon, California

AEI Project No. 442058

Prepared for:

Mr. Shady Fayed
CRP Affordable Housing & Community
4455 Morena Boulevard, Suite 107
San Diego, California 92117

Prepared by:

AEI Consultants
2500 Camino Diablo
Walnut Creek, California 94597
(925) 746-6000

Environmental
Due Diligence

Building
Assessments

Site Investigation
& Remediation

Energy Performance
& Benchmarking

Industrial Hygiene

Construction
Risk Management

Zoning Analysis
Reports & ALTA
Surveys

National Presence
Regional Focus
Local Solutions

TABLE OF CONTENTS

1.0 SITE DESCRIPTION	1
2.0 BACKGROUND	2
3.0 INVESTIGATION EFFORTS	2
3.1 Health and Safety Plan	2
3.2 Permitting and Utility Clearance	2
3.3 Geophysical Survey	2
3.4 Drilling and Sample Collection	2
3.4.1 Soil Sample Collection	2
3.4.2 Headspace Testing	3
3.4.3 Groundwater Sampling	3
3.4.4 Soil Gas Probe Installation and Sampling	3
3.4.5 Boring Destruction	4
3.5 Decontamination Procedures and Investigation-Derived Wastes	4
3.6 Laboratory Analyses	4
4.0 FINDINGS	5
4.1 Geophysical Survey	5
4.2 Subsurface Conditions	5
4.3 SOIL SAMPLE ANALYTICAL RESULTS	6
4.4 GROUNDWATER SAMPLE ANALYTICAL RESULTS	6
4.5 SOIL GAS SAMPLE ANALYTICAL RESULTS	6
5.0 SUMMARY AND CONCLUSIONS	7
6.0 REFERENCES	8
7.0 REPORT LIMITATIONS AND RELIANCE	8

FIGURES

Figure 1	Topographic Map
Figure 2	Site Map
Figure 3	Site Plan with Proposed Development

TABLES

Table 1	Soil Sample Data Summary
Table 2	Groundwater Sample Data Summary
Table 3	Soil Gas Sample Data Summary

Appendix A	Permits
Appendix B	Geophysical Survey Report
Appendix C	Soil Boring Logs
Appendix D	Laboratory Analytical Reports



December 7, 2021

Mr. Shady Fayed
CRP Affordable Housing & Community
4455 Morena Boulevard, Suite 107
San Diego, California 92117

Subject: Limited Phase II Subsurface Investigation
American Canyon Apartments Property
American Canyon, California
AEI Project No. 442058

Dear Mr. Fayed:

This report presents the results of the limited subsurface investigation performed by AEI Consultants (AEI) at American Canyon Apartments Property in American Canyon, California ("the Site"). This investigation was performed to assess a potential former 550-gallon gasoline underground storage tank (UST) that was identified as a recognized environmental condition (RECs). The Phase I Environmental Site Assessments (ESAs) dated April 16, 2020 prepared by Krazan & Associates, Inc. (Krazan) and July 1, 2021 report prepared by Partner Engineering and Science, Inc. (Partner) that identified a potential former 550-gallon UST without removal or sampling information. The purpose of this investigation was to evaluate whether the former UST is present at the Site and whether the Site has been significantly impacted by a release from the former UST. This investigation was performed in general accordance with the authorized scope of services outlined in AEI's proposal dated June 14, 2021 (AEI Proposal Numbers 77665 and 78528). Information regarding the site description, background, scope of work, findings, conclusions, and recommendations are provided in the following sections.

1.0 SITE DESCRIPTION

The Site is located west of Broadway Street and approximately 630 feet to the south of Poco Way, within the City of American Canyon, California. The Site consists of three parcels, making up approximately 3.6 acres with the associated Napa County Assessor's Parcel Numbers of 058-362-005, -016 and -021. The Site is associated with former historical site address of 3751 and 3787 Broadway Street, and is currently vacant. The Site Location Map is presented as Figure 1. The Site Map is presented as Figure 2.

According to information obtained from the Phase I ESA, the area surrounding the Site is underlain by silty clay loam and the underlying dark gray moderately alkaline clay loam. Based on the data obtained from approximately 825 feet to the south-southeast of the Site the estimated depth to groundwater is approximately 5 feet below ground surface (bgs) and the groundwater flow direction is inferred to be to the southeast.

Refer to Section 4.2 below for additional information on the Site subsurface conditions.

2.0 BACKGROUND

The Phase I ESA for the Site identified potential former 550-gallon gasoline underground storage tank (UST) without removal or sampling information as a recognized environmental condition (REC). The purpose of this investigation is to evaluate whether the former UST is present at the Site and whether the Site has been significantly impacted by a release from the former UST.

3.0 INVESTIGATION EFFORTS

AEI performed a limited subsurface investigation at the Site to assess whether the Site has been significantly impacted by the potential former 550-gallon UST. The scope of work included advancing three exploratory borings to collect soil and groundwater samples and six soil gas probes to collect soil gas samples. The locations of the borings/probes are shown on Figure 2. Figure 3 presents the boring/probe locations with respect to the proposed development.

3.1 Health and Safety Plan

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

3.2 Permitting and Utility Clearance

Drilling permits, included herein as Appendix A, were obtained from the Napa County Planning, Building & Environmental Services Division of Environmental Health agency for this investigation. Prior to field activities, boring locations were marked with white paint. Upon marking, the public underground utility locating service Underground Service Alert (USA) North was notified to identify public utilities in the work area. AEI also contracted Foresite Engineering Survey Inc. of Pleasant Hill, California to perform private utility clearance and evaluate the presence of underground utilities around planned boring locations.

3.3 Geophysical Survey

On June 22, 2021, in addition to the private utility locate, a geophysical survey was conducted by Foresite Engineering Survey, Inc. The geophysical survey was conducted in the accessible areas of the Site to evaluate for the former potential 550-gallon UST cavity for boring placement and evaluate for existing USTs or a former UST cavity. The geophysical survey was conducted using 250 MHz ground-penetrating radar (GPR) Antenna and other utility locating equipment. A summary of the results of the geophysical survey are presented in Section 4.1, and the survey report is included in Appendix B.

3.4 Drilling and Sample Collection

On June 25 and November 10, 2021, six exploratory soil borings, SB-1 through SB-6, were advanced at the locations shown on Figure 2. AEI contracted a State of California-licensed company, Environmental Control Associates, Inc. (ECA) of Aptos, California, to advance the soil borings using a truck-mounted direct push drilling rig. The locations of the borings were chosen in part based on current Site structures, results of the geophysical survey, and the locations of the proposed future structures. These locations are shown on Figure 2.

3.4.1 Soil Sample Collection

Soil samples were obtained from each of the three boring locations, SB-1, SB-2, and SB-3 using a dual-walled coring system approximately 2.25 inch in diameter and 4 feet in length containing



plastic liners. The coring system was connected to 1-inch diameter, flush-jointed drill rod that was hydraulically driven (pushed) by the rig to each target sample depth. Upon retrieval from each sample depth interval, the coring system was opened, followed by the removal and opening of the plastic liners. After opening the liners, the soils were visually inspected for the potential presence of impacted soils. The borings were continuously sampled throughout their entire depths for the purposes of visual inspection, lithologic logging, and field screening (headspace testing with a photo-ionization detector [PID]). Recovered soil samples were examined for soil classification and described on detailed boring logs in general conformance with the Unified Soil Classification System (USCS). Lithologic descriptions, visual observations of the soil, and PID readings are included on the boring logs in Appendix C.

3.4.2 Headspace Testing

Headspace testing was performed with a PID equipped with an electrodeless 10.6 eV ultraviolet lamp or equivalent for detecting the presence of total volatile organic compounds (VOCs) in the soil samples. To initiate the headspace testing procedure, soil samples were removed from the sample liners, placed into labeled, plastic bags, and sealed for conducting the tests. After sufficient time had elapsed for gas build-up inside the bag (20 to 30 minutes), each bag was punctured with the probe tip of the PID to allow for measurement of the headspace. Measurements of the headspace were obtained in the ppm range for total VOCs. The PID readings were recorded on the boring logs presented in Appendix C.

3.4.3 Groundwater Sampling

After reaching the total depth of 20 feet bgs in boring SB-1 and 16 feet bgs in borings SB-2 and SB-3, groundwater samples were collected from each of the soil borings. Temporary well materials consisting of 0.75-inch diameter, 0.010 slotted, polyvinyl chloride casing was installed into the boreholes to facilitate groundwater infiltration and groundwater sample collection from the water-bearing zone. The temporary well materials remained in-place for up to 20 minutes to allow for infiltration of groundwater into the borehole. During this timeframe, sufficient groundwater infiltrated into each borehole for groundwater sample collection.

Prior to collection of the groundwater samples, a small amount of water (approximately 500 milliliters) was purged from each borehole. After purging, a groundwater sample was collected from the locations utilizing a peristaltic pump with dedicated tubing. The samples were labeled with the project name, project number, boring number, and date/time of sampling. After labeling, the samples were entered onto chain-of-custody documentation for transportation to a State of Washington-certified laboratory for potential analyses and placed into an insulated, chilled ice chest containing ice.

3.4.4 Soil Gas Probe Installation and Sampling

Six temporary soil gas probes SB-1-SG through SB-6-SG were installed at approximately 5-foot bgs by ECA, under AEI oversight. Soil gas probe locations are shown on Figure 2.

The soil gas sampling probes were installed in general accordance with the guidelines presented in the *Advisory: Active Soil Gas Investigations* ("Advisory"), prepared by the California Department



of Toxic Substances Control (DTSC), et al., dated July 2015. The probes were constructed using 0.25-inch diameter Teflon™ tubing connected to a one-inch plastic probe tip. The probe tip was placed in the middle of an annular filter pack composed of Lonestar No. 3/12 sand. The probes were then sealed with a layer of dry granular bentonite followed by hydrated granular bentonite to grade. Dry granular bentonite was then placed above the sand pack and extended upward to the ground surface. Water was added at the surface to hydrate the upper portion of the granular bentonite to ensure proper sealing during sampling activities.

After waiting approximately two hours for each sample location to equilibrate with the surrounding material, a shut-in test was performed to check for leaks in the above-ground sampling manifold. The shut-in test was performed by exerting a vacuum on the sealed above-ground manifold with a syringe for at least one minute or longer. If there was an observable loss of vacuum, the fittings were adjusted until the vacuum in the sample train did not noticeably dissipate. Fittings used for the soil gas sampling train consisted of Swagelok® type fittings.

Following the shut-in test and purging, a soil gas sample was collected from the soil gas sampling points. A leak check was performed at each location by introducing and maintaining helium in the ambient air within a plastic shroud placed around the sample apparatus for the duration of the sample collection. The soil gas samples were collected using a dedicated laboratory-provided sampling manifold (sampling train) with an average flow rate of 150 milliliters per minute, into one-liter Summa™ canisters. Initial and final readings on the vacuum gauge were recorded at the beginning and end of sampling to confirm sample collection. Sampling was completed with a slight vacuum of approximately -5 inches of mercury (Hg) remaining in the canisters. Upon sample retrieval, the Summa™ canisters were labeled with the appropriate project information, including the project name, project number, sample location and depth, date and time of sampling, sampler's name, canister identification number, and the initial and final canister vacuums.

3.4.5 Boring Destruction

Following completion of sample collection and removal of temporary soil gas probe materials, all borings were backfilled with neat cement grout as required by the drilling permit and completed at the surface to match the surrounding conditions.

3.5 Decontamination Procedures and Investigation-Derived Wastes

AEI personnel wore disposable nitrile gloves during sample collection and changed gloves prior to and between each sample collection. Drilling and sampling equipment were decontaminated using a triple rinse system with the initial rinse consisting of an Alconox and tap water solution, followed by the second and third rinses consisting of tap water rinses.

Investigation-derived waste was left onsite in two labeled 5-gallon buckets. Proper removal and transport of the wastes to an appropriate disposal facility is recommended.

3.6 Laboratory Analyses

Soil and groundwater samples were labeled and placed into a cooler with crushed ice following sampling and transferred under appropriate chain-of-custody documentation to McCampbell



Analytical, Inc. of Pittsburg, California. Three soil samples and three groundwater samples were analyzed for total petroleum hydrocarbons (TPH) Multi Range by United States Environmental Protection Agency (US EPA) Testing Method 8015M and Volatile Organic Compounds (VOCs) by EPA Testing Method 8260B. Three soil samples were additionally analyzed for Leaking Underground Storage Tank (LUST) Metals by EPA Testing Method 6010/6020. The remaining soil samples collected were placed on hold and not analyzed as part of this investigation.

Each of the six soil gas samples were labeled and transferred under appropriate chain-of-custody documentation to Torrent Laboratory, Inc. of Milpitas, California or Pace Analytical laboratory of Mt. Juliet, Tennessee. Each of the soil gas samples were analyzed for VOCs by EPA Testing Method TO-15 and the leak check compound helium by EPA Testing Method ASTM D 1946-90.

Laboratory analytical documentation is provided in Appendix D.

4.0 FINDINGS

For the purpose of providing context to the data obtained during this investigation, analytical results are compared to available regulatory screening levels. The San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) were used for comparison values under commercial/industrial land use scenarios. The ESLs are considered to be conservative. Under most circumstances, and within the limitations described in the ESLs, the presence of a chemical in soil gas at concentrations below the corresponding ESL may be assumed to not pose a significant threat to human health and the environment. Additional evaluation may be necessary at sites where a chemical is present at concentrations above the corresponding ESL.

The findings of this investigation are summarized below.

4.1 Geophysical Survey

Prior to boring placement at the Site, a geophysical survey was performed by GPRS to evaluate for the presence of underground structures, including USTs, disturbed soils, and/or cavities utilizing GPR and other utility locating equipment. The data coverage size included accessible areas across the Site. The processed data did identify the location of a possible former UST cavity in the areas scanned, specifically in the southwest portion of the Site, but no UST was identified at the Site. The results of the geophysical survey, including a diagram of the area surveyed, are presented in Appendix B.

The client should be aware of the inherent limitations of geophysical surveying methods and that above the underground utilities and other man-made natural features (i.e., automobiles, debris piles, tree roots, reinforced concrete, certain conditions, etc.), if in the area of the survey, may decreased the effectiveness of the survey. The client should be aware that the lack of a detection of the feature from a geophysical survey does not mean that the feature does not exist only that it was not detected.

4.2 Subsurface Conditions

Subsurface conditions observed during the drilling activities of borings SB-1, SB-2, and SB-3 indicated that soils underlying the Site consist primarily of layers of clay, gravelly sand, and silty sand to a total depth of 20 feet bgs, the total depth of the investigation. Groundwater was encountered at boring locations SB-1, SB-2, and SB-3 at depths ranging from 14 to 15 feet bgs.



Visual and olfactory evidence (i.e., soil discoloration, odor) of potentially impacted soils were not observed during drilling activities of borings SB-1, SB-2, and SB-3. PID readings ranged from 0.1 to 277 ppm during the headspace testing.

4.3 Soil Sample Analytical Results

Tables 1 and 2 presents a summary of the soil sample analytical results. One soil sample from each boring (SB-1, SB-2, and SB-3) was selected for analysis. The analytical results can be summarized as follows:

- Total petroleum hydrocarbon (TPH) in gasoline range (TPH-g) was not detected above the laboratory reporting limits in the three samples collected and analyzed.
- TPH in diesel range was detected in one of the three samples collected and analyzed, observed at a concentration of 1.0 milligrams per kilogram (mg/kg). The detected concentration is significantly below the residential ESL for TPH-d of 260 mg/kg and commercial/industrial ESL of 1,200 mg/kg.
- TPH in motor oil range (TPH-mo) was detected in two of the three samples collected and analyzed, observed at concentrations of 6.3 and 13 mg/kg in samples SB-2-10 and SB-3-10, respectively. The detected concentrations are significantly below the residential ESL for TPH-mo of 12,000 mg/kg and commercial/industrial ESL of 180,000 mg/kg.
- Benzene, toluene, ethylbenzene, and xylenes or other VOCs were not detected at or above their respective laboratory reporting limits in the three samples collected and analyzed.
- LUST metals, including cadmium, chromium, lead, nickel, and zinc were either not detected or detected at concentrations below their respective residential and commercial/industrial ESLs in the three samples collected and analyzed.

4.4 Groundwater Sample Analytical Results

Table 3 presents a summary of the groundwater sample analytical results. The results can be summarized as follows:

- TPH-g and TPH-d were not detected above the laboratory reporting limits in the three samples collected and analyzed.
- TPH-mo was detected in one of the three samples collected and analyzed, observed at a concentration of 440 micrograms per liter ($\mu\text{g/L}$) in groundwater sample SB-3-GW. No maximum contaminant level (MCL) or residential and commercial/industrial ESLs are available for TPH-mo.
- Benzene, toluene, ethylbenzene, and xylenes or other VOCs were not detected at or above their respective laboratory reporting limits in the three groundwater samples collected and analyzed.

4.5 Soil Gas Sample Analytical Results

Table 4 presents a summary of the soil gas sample analytical results. The results can be summarized as follows:

- Benzene was detected in five of the six samples collected and analyzed, observed at concentrations of 16 and 9.0 micrograms per cubic meter ($\mu\text{g/m}^3$) in samples SB-1-SG and



SB-2-SG, respectively. The two detected concentrations exceed the residential ESL for benzene of $3.2 \mu\text{g}/\text{m}^3$. Locations SB-5 and SB-6, located beneath the nearest proposed new buildings yielded benzene at or below the residential ESL.

- Vinyl Chloride was detected in one of the three samples collected and analyzed, observed at a concentration of $3.3 \mu\text{g}/\text{m}^3$ in sample SB-2-SG. The detections of vinyl chloride were not confirmed in the three additional soil gas samples collected. Therefore, vinyl chloride does not appear to be a significant concern at the Site.
- Toluene, ethylbenzene, and xylenes were detected in the soil gas samples collected and analyzed, observed at concentrations below their respective residential and commercial/industrial ESLs.
- Tetrachloroethylene (PCE) was detected in three of the soil gas samples collected and analyzed, observed at concentrations of 11 and $14 \mu\text{g}/\text{m}^3$, which are below the residential ESL for PCE of $15 \mu\text{g}/\text{m}^3$ and commercial/industrial ESL of $67 \mu\text{g}/\text{m}^3$.
- Other VOCs were either detected at concentrations below their respective residential and commercial/industrial ESLs, where applicable in the three samples collected and analyzed as shown in Table 4.
- Helium, used for leak detection, was not detected in the six soil gas samples collected and analyzed, and the samples are deemed valid. The helium results are shown in Table 4.

5.0 SUMMARY AND CONCLUSIONS

AEI has performed a limited subsurface investigation at the Site as described above. The purpose of this investigation was to assess whether the Site has been significantly impacted by the possible former UST at the Site identified as a REC in the Phase I ESA. The scope of work included performing a geophysical survey and advancing six exploratory borings, SB-1 through SB-6 to collect soil, soil gas, and groundwater samples. The investigation results were compared to the residential ESLs. The investigation results can be summarized as follows:

- The three soil samples were collected and analyzed for petroleum hydrocarbons, VOCs, and metals. One sample yielded a low concentration of petroleum hydrocarbons as diesel and two samples yielded a low concentration as motor oil, below applicable commercial/industrial ESLs. No VOCs were detected in the soil samples analyzed. No metals were detected at concentrations above commercial/industrial ESLs.
- Three groundwater samples were collected and analyzed for petroleum hydrocarbons and VOCs. One sample yielded a concentration for TPH-mo of $440 \mu\text{g}/\text{L}$, however, no ESLs or MCLs are established for TPH-mo. No VOCs were detected in the groundwater samples collected and analyzed.
- Six soil gas samples were collected and analyzed. Two samples yielded concentrations of benzene of 9.0 and $16 \mu\text{g}/\text{m}^3$, which exceed the residential ESL for benzene of $3.2 \mu\text{g}/\text{m}^3$, but are located in an area of the Site that is planned for parking only and do not represent an unacceptable risk to the planned users of the area or construction workers. The two soil gas samples collected in the vicinity of the nearest proposed building yielded benzene at concentrations of 1.59 and $3.23 \mu\text{g}/\text{m}^3$, which when rounding to match the significant digits of the ESL, 3.23 becomes $3.2 \mu\text{g}/\text{m}^3$, and therefore the observed concentrations are at or below the residential ESL. The ESLs were calculated to estimate excess cancer risk at no more



than one in a million. Therefore, the presence of benzene in soil gas does not propose an unacceptable risk to the proposed residential development project and no mitigation measures are necessary for the project.

Based on the investigation performed, a former UST cavity was identified, but no UST was located. Although low concentrations of petroleum hydrocarbons and VOCs were observed in the samples collected, it does not appear that the former UST has resulted in significant contamination at the Site.

6.0 REFERENCES

Krazan & Associates, Inc., 2020. *Phase I Environmental Site Assessment, American Canyon Apartments Property, American Canyon, Napa County*. April 16.

Partner Engineering and Science, Inc., 2021. *Draft Phase I Environmental Site Assessment, American Canyon Apartments Property, American Canyon, Napa County*. July 1.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2019, *Environmental Screening Levels*, dated July 2019, revision 2.

California Department of Toxic Substances Control, California Environmental Protection Agency, and Los Angeles and San Francisco Bay Regional Water Quality Control Boards, 2015. *Advisory, Active Soil Gas Investigations*. July.

California Department of Toxic Substances Control, et al., 2011. *Final: Vapor Intrusion Guidance*.

7.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of CRP Affordable Housing & Community. All reports, both verbal and written, whether in draft or final, are for the benefit of



Limited Phase II Subsurface Investigation

American Canyon Apartments Property
American Canyon, California

CRP Affordable Housing & Community. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by CRP Affordable Housing & Community. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

AEI appreciates the opportunity to support this important project. If there are any questions regarding our investigation, please do not hesitate to contact Ms. Peg Muller-Conti at (831) 251-3131, or the undersigned.

Sincerely,
AEI Consultants

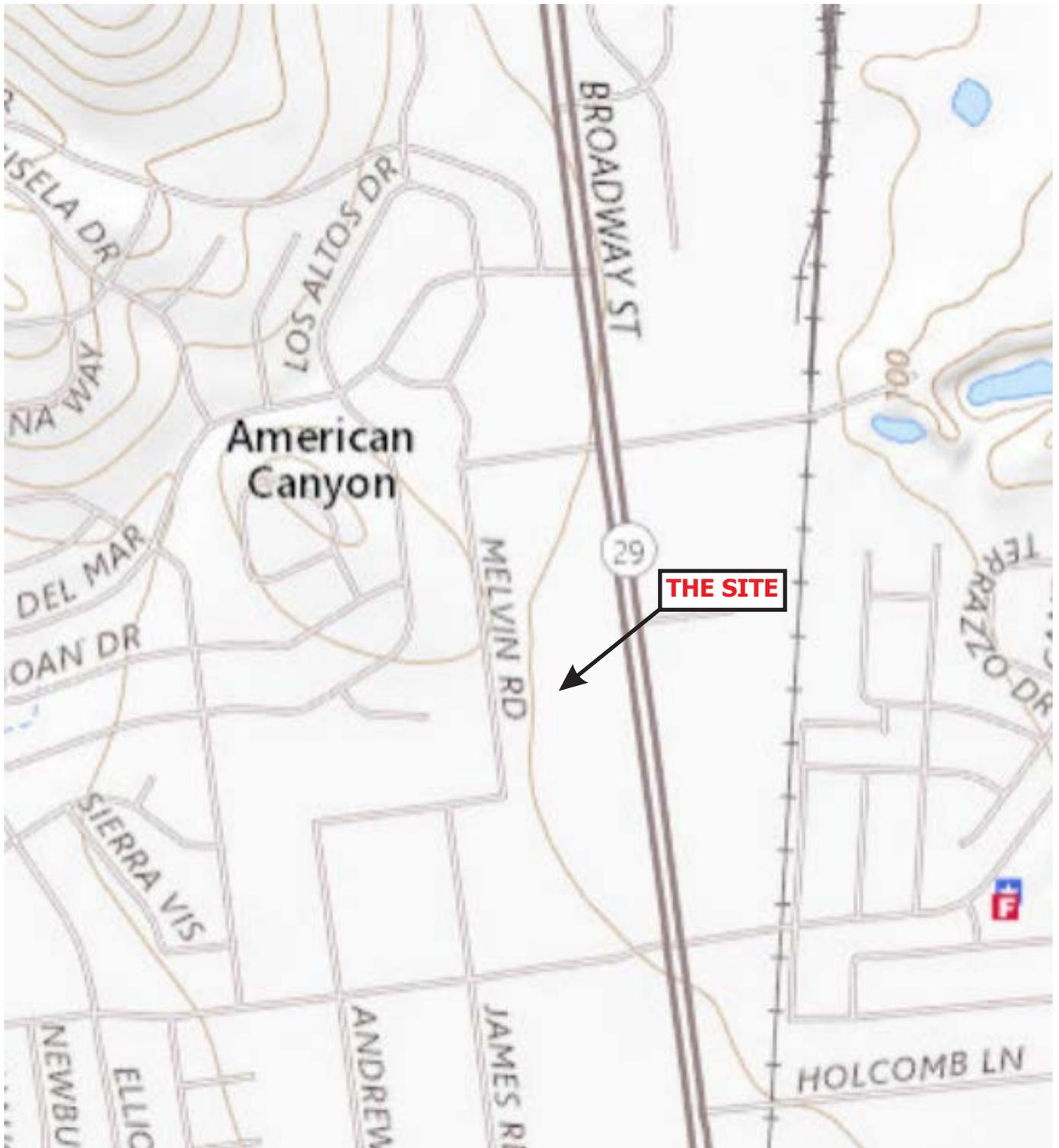


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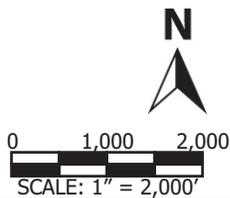
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FIGURES



LEGEND

Map: Cuttings Wharf, California
 Date: 2018
 Source: USGS



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SITE LOCATION MAP

AMERICAN CANYON APARTMENTS
 AMERICAN CANYON, CA

FIGURE 1
 Project No. 442058



LEGEND

- Approximate Property Boundary
- Approximate Soil, Groundwater, and Soil Gas Sample Location (AEI, July 2021)
- Approximate Soil Gas Sample Location (AEI, November 2021)

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SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 2
Project No. 442058

TABLES

TABLE 1: SOIL SAMPLE DATA SUMMARY
American Canyon Apartments
American Canyon, California

Location ID	Date	Depth (feet bgs)	TPH-g (C6-C12) (mg/kg)	TPH-d (C10-C23) (mg/kg)	TPH-mo (C18-C36) (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Total Xylenes (mg/kg)	Remaining VOCs (mg/kg)
SB-1-10	6/25/2021	10	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<RL
SB-2-10	6/25/2021	10	<1.0	<1.0	6.3	<0.0050	<0.0050	<0.0050	<0.0050	<RL
SB-3-10	6/25/2021	10	<1.0	1.0	13	<0.0050	<0.0050	<0.0050	<0.0050	<RL
Comparison Values:										
ESL Direct Exposure - R			430	260	12,000	0.33	1,100	5.9	580	Various
ESL Direct Exposure - C/I			2,000	1,200	180,000	1.4	5,300	26	2,500	Various

Notes:

- mg/kg milligrams per kilogram
- <RL less than the laboratory reporting limit
- bgs below ground surface
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-mo Total Petroleum Hydrocarbons as Motor Oil
- VOCs Volatile organic compounds

Comparison Values:

ESL Direct Exposure - R: Environmental Screening Levels (ESLs) showing Direct Exposure Human Health Residential (R) Use exposure risks from July 2019 (Rev. 2) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board

ESL Direct Exposure - C/I: Environmental Screening Levels (ESLs) showing Direct Exposure Human Health Commercial/Industrial (C/I) Use exposure risks from July 2019 (Rev. 2) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board

TABLE 2: SOIL SAMPLE DATA SUMMARY - METALS
American Canyon Apartments
American Canyon, California

Location ID	Date	Depth (feet bgs)	Cadmium Cd (mg/kg)	Chromium Cr (mg/kg)	Lead Pb (mg/kg)	Nickel Ni (mg/kg)	Zinc Zn (mg/kg)
SB-1-10	6/25/2021	5	<0.50	60	7.0	89	83
SB-2-10	6/25/2021	5	<0.50	60	7.2	93	56
SB-3-10	6/25/2021	5	<0.50	50	6.2	63	50
Comparison Values:							
ESL Direct Exposure - R			78	--	80	820	23,000
ESL Direct Exposure - C/I			1,100	--	320	11,000	350,000
Maximum Background Concentrations			1.70	1,579	97.1	509	236

Notes:

mg/kg Milligrams per kilogram
<0.50 less than the laboratory reporting limit
bgs Below ground surface
-- not established

Comparison Values:

ESL Direct Exposure - R: Environmental Screening Levels (ESLs) Direct Exposure Human Health Residential (R) Use exposure risks from July 2019 (Rev. 2) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board

ESL Direct Exposure - C/I: Environmental Screening Levels (ESLs) Direct Exposure Human Health Commercial/Industrial (C/I) Use exposure risks from July 2019 (Rev. 2) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board

TABLE 3: GROUNDWATER SAMPLE DATA SUMMARY
American Canyon Apartments, American Canyon, California

Location ID	Date	TPH-g (C6-C12) (µg/L)	TPH-d (C10-C23) (µg/L)	TPH-mo (C18-C36) (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Remaining VOCs (µg/L)
SB-1-GW	6/25/2021	<50	<50	<250	<0.20	<0.50	<0.50	<0.50	<RL
SB-2-GW	6/25/2021	<50	<50	<250	<0.20	<0.50	<0.50	<0.50	<RL
SB-3-GW	6/25/2021	<50	<50	440	<0.20	<0.50	<0.50	<0.50	<RL
Comparison Values:									
	MCL Priority	760	200	--	1.0	40	30	20	Various
	ESL Vapor Intrusion - (R)	--	--	--	0.42	1,200	3.5	390	Various
	ESL Vapor Intrusion - (C/I)	--	--	--	1.8	4,900	15	1,600	Various

Notes:

- µg/L Micrograms per liter
- <RL Less than the laboratory reporting limit
- <0.50 Analyte not detected at or above the stated laboratory reporting limit
- Not established
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-mo Total Petroleum Hydrocarbons as Motor Oil
- VOCs Volatile Organic Compounds

Comparison Values:

ESL Direct Exposure: Direct Exposure Human Health Risk Level, based on Maximum Contaminant Level (MCL) Priority; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control

ESL Vapor Intrusion: Environmental Screening Levels (ESLs) showing Groundwater Vapor Intrusion Human Health Risk Levels for Residential (R) and Commercial/Industrial (C/I) exposure risks from July 2019 (Revision 2) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board.

TABLE 4: SOIL VAPOR SAMPLE DATA SUMMARY
American Canyon Apartments, American Canyon, California

Location ID	Date	Depth (feet bgs)	Benzene (µg/m ³)	Toluene (µg/m ³)	Ethylbenzene (µg/m ³)	m,p-Xylene (µg/m ³)	o-Xylene (µg/m ³)	PCE (µg/m ³)	TCE (µg/m ³)	Vinyl Chloride (µg/m ³)	Acetone (µg/m ³)	Allyl Chloride (µg/m ³)	Carbon Disulfide (µg/m ³)	Chloroform (µg/m ³)	Chloromethane (µg/m ³)	Cyclohexane (µg/m ³)
SB-1-SG	6/25/2021	5	16	13	3.9	4.1	<2.2	11	<2.7	<1.3	240 E	NA	16	<2.4	<3.5	NA
SB-2-SG	6/25/2021	5	9.0	9.2	2.8	3.3	<2.2	14	<2.7	3.3	380	NA	18	3.7	<4.1	NA
SB-3-SG	6/25/2021	5	<9.6	<11	<13	<13	<2.2	<20	<2.7	<7.7	110	NA	<9.3	<15	<25	NA
SB-4-SG	11/10/2021	5	2.55	10.8	1.12	6.76	1.63	1.39	<1.07	<0.511	22.7	<0.626	<0.622	<0.973	0.901	5.51
SB-5-SG	11/10/2021	5	3.23	<1.88	1.62	7.59	2.95	<1.36	<1.07	<0.511	19.8	1.53	1.70	<0.973	2.17	6.23
SB-6-SG	11/10/2021	5	1.59	9.12	1.04	3.89	1.29	<1.36	1.28	<0.511	12.0	<0.626	2.39	<0.973	0.649	1.96
Comparison Values:																
	ESL-Vapor Intrusion-R		3.2	10,000	37	3,500	3,500	15	16	0.32	1,100,000	--	--	4.1	3,100	--
	ESL-Vapor Intrusion-C/I		14	44,000	160	15,000	15,000	67	100	5.2	4,500,000	--	--	18	13,000	--

Notes:

- bgs Below ground surface
- µg/m³ Micrograms per cubic meter
- <PQL A laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise.
- <RDL Less than the laboratory reported detection limit
- <1.3 Analyte not detected at or above the stated laboratory reporting limit
- Not established
- E Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
- NA Not analyzed
- PCE Tetrachloroethene
- MEK Methyl ethyl ketone
- MIBK 4-Methyl-2-Pentanone
- VOCs Volatile Organic Compounds
- BOLD** Indicates exceedance of a comparison value

Comparison Values:

ESL-Vapor Intrusion-R: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Residential (R) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control Board.

ESL-Vapor Intrusion-C/I: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Commercial/Industrial (C/I) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control Board.

TABLE 4: SOIL VAPOR SAMPLE DATA SUMMARY
American Canyon Apartments, American Canyon, California

Location ID	Date	Depth (feet bgs)	Ethanol (µg/m ³)	4-Ethyl-toluene (µg/m ³)	2-Propanol (Isopropyl Alcohol) (µg/m ³)	Trichloro-fluoromethane (µg/m ³)	Dichlorodi-fluoromethane (µg/m ³)	Heptane (µg/m ³)	n-Hexane (µg/m ³)	2-Hexanone (µg/m ³)	Methylene Chloride (µg/m ³)	2-Butanone (MEK) (µg/m ³)	Tert-Butanol (µg/m ³)	2-Propanol (µg/m ³)
SB-1-SG	6/25/2021	5	NA	<2.5	48	<2.8	<2.5	NA	11	<2.1	<10	34	14	48
SB-2-SG	6/25/2021	5	NA	<2.5	60	<2.8	2.7	NA	14	5.5	<10	140	20	60
SB-3-SG	6/25/2021	5	NA	<15	<74	<2.8	<15	NA	<11	<12	<62	380	<9.1	<74
SB-4-SG	11/10/2021	5	46.2	<0.982	5.6	1.33	1.70	10.7	46.9	NA	4.06	26.9	NA	5.60
SB-5-SG	11/10/2021	5	45.4	2.02	4.06	1.21	1.81	1.92	2.29	NA	8.40	<3.69	NA	4.06
SB-6-SG	11/10/2021	5	10.4	<0.982	3.83	1.95	2.37	1.70	36.7	NA	1.31	4.78	NA	3.83
	ESL-Vapor Intrusion-R		--	--	--	--	--	--	--	--	34	170,000	--	--
	ESL-Vapor Intrusion-C/I		--	--	--	--	--	--	--	--	410	730,000	--	--

Notes:

- bgs Below ground surface
- µg/m³ Micrograms per cubic meter
- <PQL A laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise.
- <RDL Less than the laboratory reported detection limit
- <1.3 Analyte not detected at or above the stated laboratory reporting limit
- Not established
- E Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
- NA Not analyzed
- PCE Tetrachloroethene
- MEK Methyl ethyl ketone
- MIBK 4-Methyl-2-Pentanone
- VOCs Volatile Organic Compounds
- BOLD** Indicates exceedance of a comparison value

Comparison Values:

ESL-Vapor Intrusion-R: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Residential (R) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control Board.

ESL-Vapor Intrusion-C/I: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Commercial/Industrial (C/I) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control Board.

TABLE 4: SOIL VAPOR SAMPLE DATA SUMMARY
American Canyon Apartments, American Canyon, California

Location ID	Date	Depth (feet bgs)	MIBK (µg/m ³)	Styrene (µg/m ³)	1,2,4-Trimethyl-benzene (µg/m ³)	1,3,5-Trimethyl-benzene (µg/m ³)	2,2,4-Trimethyl-pentane (µg/m ³)	Vinyl Acetate (µg/m ³)	1,1-Difluoroethane (µg/m ³)	Remaining VOCs (µg/m ³)	Helium Detected in Sample (%)	Field Helium Shroud (%)	Maximum Allowable Helium Detection in Sample (%)
SB-1-SG	6/25/2021	5	54	3.3	<2.5	<2.5	NA	<1.8	<14	<PQL	<1.7	27.3	1.37
SB-2-SG	6/25/2021	5	41	2.3	<2.5	<2.5	NA	<1.8	<14	<PQL	<2.0	29.3	1.47
SB-3-SG	6/25/2021	5	30	<13	<15	<15	NA	<11	<81	<PQL	<1.2	35.2	1.76
SB-4-SG	11/10/2021	5	<5.12	<0.851	<0.982	<0.982	<0.934	<0.704	10.4	<RDL	<0.100	20.1	1.01
SB-5-SG	11/10/2021	5	<5.12	<0.851	2.04	1.27	<0.934	<0.704	101	<RDL	<0.100	21.2	1.06
SB-6-SG	11/10/2021	5	<5.12	<0.851	0.987	0.982	7.61	6.80	3.05	<RDL	<0.100	21.4	1.07
ESL-Vapor Intrusion-R			--	31,000	--	--	--	--	--	Various	--	--	--
ESL-Vapor Intrusion-C/I			--	130,000	--	--	--	--	--	Various	--	--	--

Notes:

- bgs Below ground surface
- µg/m³ Micrograms per cubic meter
- <PQL A laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both
- <RDL Less than the laboratory reported detection limit
- <1.3 Analyte not detected at or above the stated laboratory reporting limit
- Not established
- E Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
- NA Not analyzed
- PCE Tetrachloroethene
- MEK Methyl ethyl ketone
- MIBK 4-Methyl-2-Pentanone
- VOCs Volatile Organic Compounds
- BOLD** Indicates exceedance of a comparison value

Comparison Values:

ESL-Vapor Intrusion-R: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Residential (R) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by the San Francisco Bay Regional Water Quality Control Board.

ESL-Vapor Intrusion-C/I: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for the Commercial/Industrial (C/I) Use Exposure Scenario; Environmental Screening Levels (ESLs) from 2019 ESL Summary Tables, Revision 2, prepared by San Francisco Bay Regional Water Quality Control Board.

APPENDIX A

PERMITS

CONDITIONS / INSPECTIONS / COMMENTS

Application Type:	Soil Borings	File Date: 6/24/2021
Permit Number:	E21-00371	Issued Date: 6/24/2021
Parcel Number:	058-362-021-000	Expiration Date: 6/24/2023
Owner:	DAMBROSIO FRANK P JR ETAL TR	Phone: (000) 000-0000
Applicant:	Robert Hammer	Phone: (000) 000-0000

CONDITIONS

Code:	Condition:
SB-1	<p>In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:</p> <ol style="list-style-type: none"> 1) Compliance with the State of California Worker's Compensation Laws; 2) Compliance with the State and Federal Worker Health and Safety Laws; 3) Location of all underground and aboveground utilities which might be impacted by the proposed work; 4) Compliance with the Napa County and State of California well requirements; 5) Notification to Napa County PBES at least two (2) workdays before work is initiated; 6) Notification to Napa County within two (2) workdays of discovery of contaminated soil or ground water.
STRM-02	<p>The owner shall comply with the Napa Countywide Stormwater Pollution Prevention Program, "Erosion and Sediment Control Measures for Construction Projects". Failure to comply with best management practices for erosion and sediment control will result in issuance of a stop-work order.</p>

INSPECTIONS

Inspection Type:	Inspected By:	Inspection Date:
Destruction Inspection		6/25/2021

COMMENTS

Date:	Comment:
6/24/2021	<p>Call 253-4135 at least 24 hours in advance during normal business hours to schedule inspection requests. Inspections are taken on a first-come-first-served basis so if you need a specific date and time be sure to call well in advance</p> <p>Well permits are issued only to licensed well drillers. A copy of the well driller's license (C-57) must be on file with DEM.</p> <p>If a claim is to be submitted for a refund, per County Code, a 25% processing fee will be retained. Such claims must be made within one year of the date on the receipt.</p>

Permit Application
Page 2 of 2

Well/Boring Location: Are all wells/borings covered by this application on a single parcel and not on adjoining parcels or public or utility rights-of-way? Yes No If **no**, list other parcels, public rights-of-way or utility rights-of-way. Note: Each parcel with a new well or new boring must have a separate permit for that parcel.

1. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

2. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

3. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

NOTE: For each parcel listed above which is under different ownership, a letter authorizing access and work on the property must be submitted. The letter must include address, Assessor's parcel number and the notarized signature of the owner or legal agent for the owner. If any wells are proposed on public or utility rights-of-way, a written clearance and/or encroachment permit must accompany application.

Well/Boring Construction

Bore Hole Diameter: 2.25	Maximum Depth: 20 feet	Annular Space:
Casing: Diameter:	Gauge:	Material:
Grout: Depth of Seal:	Type of Grout: Bentonite	
Conductor Casing: Yes <input type="checkbox"/> No <input type="checkbox"/>		

Check if wells are intended to be constructed into aquifers below the first encountered one. Indicate how cross contamination will be prevented on a separate sheet.

Well reconstruction and destruction applications must include a written description of work proposed and existing well information.

Disposal Methods

Soil Cuttings <input checked="" type="checkbox"/>	Development/Rinsate Water <input checked="" type="checkbox"/>
---	---

In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:

- 1) Compliance with the State of California Worker's Compensation Laws;
- 2) Compliance with the State and Federal Worker Health and Safety Laws;
- 3) Location of all underground and aboveground utilities which might be impacted by the proposed work;
- 4) Compliance with the Napa County and State of California well requirements;
- 5) Notification to Napa County PBES at least two (2) workdays before work is initiated,
- 6) Notification to Napa County within two (2) workdays of the discovery of contaminated soil or ground water and;
- 7) Filing a completed well log for each well within four (4) months of completion to Napa County and the State Department Water Resources.

Signature of Authorized Agent of Drilling Contractor _____ Date June 21, 2021

FOR OFFICIAL USE ONLY:

Required certificate of current worker's compensation insurance is on file with DEM;

Consultant: Exp. Date: _____ Confirmed: _____

Contractor: Exp. Date: _____ Confirmed: _____

Permit Issued by: _____ Date: _____

Permit is valid for one (1) year from date of issuance.



LEGEND

- Approximate Property Boundary
- Proposed Soil Boring Location
(to be confirmed with geophysical survey)

AEI Consultants

SITE MAP

American Canyon
 Apartment Property
 Broadway Street
 American Canyon, California

FIGURE 1
 Proposal No. 77665



A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, 2nd Floor
Napa CA 94559
www.countyofnapa.org
Main: (707) 253-4417

Soil Boring Permit

David Morrison
Director

Application Type:	Soil Borings	File Date:	6/24/2021
Permit Number:	E21-00372	Issued Date:	6/24/2021
Parcel Number:	058-362-016-000	Expiration Date:	6/24/2023
Site Address:	BROADWAY, AMERICAN CANYON, CA		
Owner:	DAMBROSIO FRANK P JR ETAL TR	Phone:	(000) 000-0000
Address:	C/O DONALD DAMBROSIO 539 BONITA AVE		
Applicant:	Robert Hammer	Phone:	(000) 000-0000
Business Name:	ENVIRONMENTAL CONTROL ASSOCIATES	License #:	695970
Project Type:	Soil Borings		

Type of Investigation: Phase 2 **Number of Borings:** 2

LOP Site Number:

Are all borings covered by this application on a single parcel and not on adjoining parcels or public or utility rights-of-way?
Yes No

Is an Encroachment Permit Required? No

Encroachment Permit Number:

Is Worker's Compensation insurance confirmed? Yes

Expires: 5/20/2022

Disposal Methods

Soil Cuttings:	Removed	Development/Rinsate Water:	Removed
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Specifications

Bore Hole Diameter:	2.25	Depth of Seal:	20
Maximum Depth:	20.00	Type of Grout:	Bentonite
Method of Seal Placement:	Tremie Pipe/Pump	Other:	

TO PERMITEE:

Any work performed or operations conducted under the auspices of this permit constitutes acceptance of all conditions, inspections and comments contained in the this permit, and the incorporation of all requirements as set forth in the permit application.

Staff Signature: *Kevin Whitman* Date: 6-24-2021

CONDITIONS / INSPECTIONS / COMMENTS

Application Type:	Soil Borings	File Date: 6/24/2021
Permit Number:	E21-00372	Issued Date: 6/24/2021
Parcel Number:	058-362-016-000	Expiration Date: 6/24/2023
Owner:	DAMBROSIO FRANK P JR ETAL TR	Phone: (000) 000-0000
Applicant:	Robert Hammer	Phone: (000) 000-0000

CONDITIONS

Code:	Condition:
SB-1	<p>In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:</p> <ol style="list-style-type: none"> 1) Compliance with the State of California Worker's Compensation Laws; 2) Compliance with the State and Federal Worker Health and Safety Laws; 3) Location of all underground and aboveground utilities which might be impacted by the proposed work; 4) Compliance with the Napa County and State of California well requirements; 5) Notification to Napa County PBES at least two (2) workdays before work is initiated; 6) Notification to Napa County within two (2) workdays of discovery of contaminated soil or ground water.
STRM-02	<p>The owner shall comply with the Napa Countywide Stormwater Pollution Prevention Program, "Erosion and Sediment Control Measures for Construction Projects". Failure to comply with best management practices for erosion and sediment control will result in issuance of a stop-work order.</p>

INSPECTIONS

Inspection Type:	Inspected By:	Inspection Date:
Destruction Inspection		6/25/2021

COMMENTS

Date:	Comment:
6/24/2021	<p>Call 253-4135 at least 24 hours in advance during normal business hours to schedule inspection requests. Inspections are taken on a first-come-first-served basis so if you need a specific date and time be sure to call well in advance</p> <p>Well permits are issued only to licensed well drillers. A copy of the well driller's license (C-57) must be on file with DEM.</p> <p>If a claim is to be submitted for a refund, per County Code, a 25% processing fee will be retained. Such claims must be made within one year of the date on the receipt.</p>

Monitoring Well/Soil Boring Permit Application

Napa County Planning, Building & Environmental Services

Napa County Use Only FEE EXEMPT SITE: Y <input type="checkbox"/> N <input type="checkbox"/> If NO, FEE \$ _____ Date _____ By _____ Receipt # _____ Permit # <u>E21-00372</u>	Application for: Monitoring Wells <input type="checkbox"/> Extraction Wells <input type="checkbox"/> Other <input type="checkbox"/> Cathodic Protection Wells <input type="checkbox"/> Exploratory Hole (boring) <input checked="" type="checkbox"/> (Please check one) Type of Investigation: Geotechnical <input type="checkbox"/> Phase 2 <input checked="" type="checkbox"/> LOP <input type="checkbox"/> Other <input type="checkbox"/> (Please check one) 058-362-016 <hr/> LOP SITE NUMBER _____ ASSESSOR'S PARCEL NUMBER _____
--	--

- The following **MUST** be included before this permit application can be processed:
- | | |
|---|--|
| 1. Assessor's Parcel Number | 4. Encroachment permit(s) (if required) |
| 2. Well location map (showing both proposed and existing wells) | 5. Clearance from public agency(ies) (if required) |
| 3. Permission document(s) (if required) | |

Site Name: <u>VACANT LAND</u>	Property Owner: <u>AGENT BRUCE PETERS</u>
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Site Address: <u>APN: 058-362-021</u>	City: <u>American Canyon</u> Zip: <u>94503</u>
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Owner's Mailing Address: <u>6484 WASHINGTON ST. STE "A"</u>	City: <u>YOUNTVILLE</u> Zip: <u>94599</u> <u>CEL: 707-328-7048</u>
---	---

Drilling Contractor: <u>Environmental Control Associates</u>	Type of License: <u>C57 Drillers License</u>
--	--

Mailing Address: <u>3011 Twin Palms Drive</u>	License #: <u>695970</u>
---	--------------------------

City: <u>Aptos</u>	State: <u>California</u>	Zip: <u>94070</u>
--------------------	--------------------------	-------------------

Consultant: <u>AEI Consultants</u>	Telephone #: _____
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Address: <u>2500 Camino Diablo</u>	City: <u>Walnut Creek</u>	State: <u>CA</u>	Zip: <u>94597</u>
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Responsible Person at Site: <u>Natasha Budimirovic</u>	Cell Phone # <u>669-999-6118</u>
--	----------------------------------

Type of Work			
New Construction of wells - <input type="checkbox"/> # of wells _____	Destruction of wells - <input type="checkbox"/> # of wells _____	Reconditioning of wells (reconstruct or repair) - <input type="checkbox"/> - # of wells _____	New Construction of borings <input checked="" type="checkbox"/> # of borings ² _____
Wells currently on Site? - <input type="checkbox"/> - # of wells _____			

Reason for Well Installation (Check as many as apply):			
Underground tank site: <input checked="" type="checkbox"/>	Surface Impoundment: <input type="checkbox"/>	Tanks Still Present: <input type="checkbox"/>	Landfill Site: <input type="checkbox"/>
Spill or Discharge Site: <input type="checkbox"/>	Cathodic Protection: <input type="checkbox"/>	Baseline Study: <input type="checkbox"/>	Other: <input type="checkbox"/>

Other Site Information:			
Closest Distance to: _____			
Septic System: _____	Sewer Line: _____	Water Wells: _____	Rivers, Creeks, or Lakes: _____
Underground Utilities: _____	Underground Storage Tanks: _____		

Riparian Cover Permit Required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Issued by the County Public Works Dept. (Attach Copy)
May apply to any site outside City limits and within 150 feet of a designated waterway.	

**Permit Application
Page 2 of 2**

Well/Boring Location: Are all wells/borings covered by this application on a single parcel and not on adjoining parcels or public or utility rights-of-way? Yes No If **no**, list other parcels, public rights-of-way or utility rights-of-way.
Note: Each parcel with a new well or new boring must have a separate permit for that parcel.

1. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

2. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

3. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

NOTE: For each parcel listed above which is under different ownership, a letter authorizing access and work on the property must be submitted. The letter must include address, Assessor's parcel number and the notarized signature of the owner or legal agent for the owner. If any wells are proposed on public or utility rights-of-way, a written clearance and/or encroachment permit must accompany application.

Well/Boring Construction

Bore Hole Diameter: 2.25 in	Maximum Depth: 20 feet	Annular Space:
Casing: Diameter:	Gauge:	Material:
Grout: Depth of Seal:	Type of Grout: Bentonite	
Conductor Casing: Yes <input type="checkbox"/>	No <input type="checkbox"/>	

Check if wells are intended to be constructed into aquifers below the first encountered one. Indicate how cross contamination will be prevented on a separate sheet.

Well reconstruction and destruction applications must include a written description of work proposed and existing well information.

Disposal Methods

Soil Cuttings <input checked="" type="checkbox"/>	Development/Rinsate Water <input checked="" type="checkbox"/>
---	---

In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:

- 1) Compliance with the State of California Worker's Compensation Laws;
- 2) Compliance with the State and Federal Worker Health and Safety Laws;
- 3) Location of all underground and aboveground utilities which might be impacted by the proposed work;
- 4) Compliance with the Napa County and State of California well requirements;
- 5) Notification to Napa County PBES at least two (2) workdays before work is initiated,
- 6) Notification to Napa County within two (2) workdays of the discovery of contaminated soil or ground water and;
- 7) Filing a completed well log for each well within four (4) months of completion to Napa County and the State Department Water Resources.

Signature of Authorized Agent of Drilling Contractor

June 22, 2021
Date

FOR OFFICIAL USE ONLY:

Required certificate of current worker's compensation insurance is on file with DEM;

Consultant: Exp. Date: _____ Confirmed: _____

Contractor: Exp. Date: _____ Confirmed: _____

Permit Issued by: _____ Date: _____

Permit is valid for one (1) year from date of issuance.



LEGEND

- Approximate Property Boundary
-  Proposed Soil Boring Location
(to be confirmed with geophysical survey)

AEI Consultants

SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 1
Proposal No. 77665

CONDITIONS / INSPECTIONS / COMMENTS

Application Type:	Soil Borings	File Date:	11/2/2021
Permit Number:	E21-00766	Issued Date:	11/3/2021
Parcel Number:	058-362-021-000	Expiration Date:	11/3/2023
Owner:	DAMBROSIO FRANK P JR ETAL TR	Phone:	(000) 000-0000
Applicant:	Natasha Budimirovic	Phone:	(408) 442-2605

CONDITIONS

Code:	Condition:
SB-1	In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following: 1)Compliance with the State of California Worker's Compensation Laws; 2)Compliance with the State and Federal Worker Health and Safety Laws; 3)Location of all underground and aboveground utilities which might be impacted by the proposed work; 4)Compliance with the Napa County and State of California well requirements; 5)Notification to Napa County PBES at least two (2) workdays before work is initiated; 6)Notification to Napa County within two (2) workdays of discovery of contaminated soil or ground water.
STRM-02	The owner shall comply with the Napa Countywide Stormwater Pollution Prevention Program, "Erosion and Sediment Control Measures for Construction Projects". Failure to comply with best management practices for erosion and sediment control will result in issuance of a stop-work order.

INSPECTIONS

Inspection Type:	Inspected By:	Inspection Date:
Destruction Inspection	Marcia Mcewen	11/3/2021

COMMENTS

Date:	Comment:
11/2/2021	Call 253-4135 at least 48 hours in advance during normal business hours to schedule inspection requests. Inspections are taken on a first-come-first-served basis so if you need a specific date and time be sure to call well in advance Any deviation from these permit specifications without prior approval from the Department of Environmental Management will be cause for stopping work until the changes are fully justified and approved. If a claim is to be submitted for a refund, per County Code, a 25% processing fee will be retained. Such claims must be made within one year of the date on the receipt.

**Monitoring Well/Soil Boring Permit Application
Napa County Planning, Building & Environmental Services**

Napa County Use Only
 FEE EXEMPT SITE: Y N
 If NO, FEE \$ _____
 Date _____ By _____
 Receipt # _____
 Permit # _____

Application for: Monitoring Wells Extraction Wells Other
 Cathodic Protection Wells Exploratory Hole (boring)
(Please check one)

Type of Investigation: Geotechnical Phase 2 LOP Other
(Please check one)

058-362-016

LOP SITE NUMBER

ASSESSOR'S PARCEL NUMBER

The following **MUST** be included before this permit application can be processed:

1. Assessor's Parcel Number
2. Well location map (showing both proposed and existing wells)
3. Permission document(s) (if required)
4. Encroachment permit(s) (if required)
5. Clearance from public agency(ies) (if required)

Site Name: **Vacant Land**

Property Owner: **Agent Bruce Peters**

Site Address: **058-362-021**

City: **American Canyon** Zip: **94503**

Owner's Mailing Address: **6484 Washington Street, Ste "A"** City: **Yountville,** Zip: **94599**

Drilling Contractor: **Environmental Control Associates**

Type of License: **C57 Drillers License**

Mailing Address: **3011 Twin Palms Drive**

License #: **695970**

City: **Aptos**

State: **California**

Zip: **94070**

Consultant: **AEI Consultants**

Telephone #:

Address: **2500 Camino Diablo**

City: **Walnut Creek**

State: **CA**

Zip: **94597**

Responsible Person at Site: **Natasha Budimirovic**

Cell Phone # **408-442-2605**

Type of Work

New Construction of wells - # of wells _____ Destruction of wells - # of wells _____
 Reconditioning of wells (reconstruct or repair) - - # of wells _____
 Wells currently on Site? - 0 - # of wells _____ New Construction of borings # of borings 2

Reason for Well Installation (Check as many as apply):

Underground tank site: <input type="checkbox"/>	Surface Impoundment: <input type="checkbox"/>
Tanks Still Present: <input type="checkbox"/>	Landfill Site: <input type="checkbox"/>
Spill or Discharge Site: <input type="checkbox"/>	Cathodic Protection: <input type="checkbox"/>
Baseline Study: <input type="checkbox"/>	Other: <input type="checkbox"/>

Other Site Information:

Closest Distance to:

Septic System:

Sewer Line:

Water Wells:

Rivers, Creeks, or Lakes:

Underground Utilities:

Underground Storage Tanks:

Riparian Cover Permit Required? Yes No

Issued by the County Public Works Dept. *(Attach Copy)*

May apply to any site outside City limits and within 150 feet of a designated waterway.

**Permit Application
Page 2 of 2**

Well/Boring Location: Are all wells/borings covered by this application on a single parcel and not on adjoining parcels or public or utility rights-of-way? Yes No If **no**, list other parcels, public rights-of-way or utility rights-of-way.
Note: Each parcel with a new well or new boring must have a separate permit for that parcel.

1. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

2. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

3. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

NOTE: For each parcel listed above which is under different ownership, a letter authorizing access and work on the property must be submitted. The letter must include address, Assessor's parcel number and the notarized signature of the owner or legal agent for the owner. If any wells are proposed on public or utility rights-of-way, a written clearance and/or encroachment permit must accompany application.

Well/Boring Construction

Bore Hole Diameter: 2.25 in	Maximum Depth: 20 feet	Annular Space:
Casing: Diameter:	Gauge:	Material:
Grout: Depth of Seal:	Type of Grout: Bentonite	
Conductor Casing: Yes <input type="checkbox"/> No <input type="checkbox"/>		

Check if wells are intended to be constructed into aquifers below the first encountered one. Indicate how cross contamination will be prevented on a separate sheet.
Well reconstruction and destruction applications must include a written description of work proposed and existing well information.

Disposal Methods

Soil Cuttings <input checked="" type="checkbox"/>	Development/Rinsate Water <input type="checkbox"/>
---	--

In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:

- 1) Compliance with the State of California Worker's Compensation Laws;
- 2) Compliance with the State and Federal Worker Health and Safety Laws;
- 3) Location of all underground and aboveground utilities which might be impacted by the proposed work;
- 4) Compliance with the Napa County and State of California well requirements;
- 5) Notification to Napa County PBES at least two (2) workdays before work is initiated,
- 6) Notification to Napa County within two (2) workdays of the discovery of contaminated soil or ground water and;
- 7) Filing a completed well log for each well within four (4) months of completion to Napa County and the State Department Water Resources.


10/29/2021

 Signature of Authorized Agent of Drilling Contractor Date

FOR OFFICIAL USE ONLY:
 Required certificate of current worker's compensation insurance is on file with DEM;
 Consultant: Exp. Date: _____ Confirmed: _____
 Contractor: Exp. Date: _____ Confirmed: _____

Permit Issued by: _____ Date: _____
Permit is valid for one (1) year from date of issuance.

PLANS APPROVED

Division of Environmental Health

COUNTY OF NAPA

Date: 11/3/2021

PM



LEGEND

- Approximate Property Boundary
- Approximate Soil, Groundwater, and Soil Gas Sample Location
- Proposed Sample Location

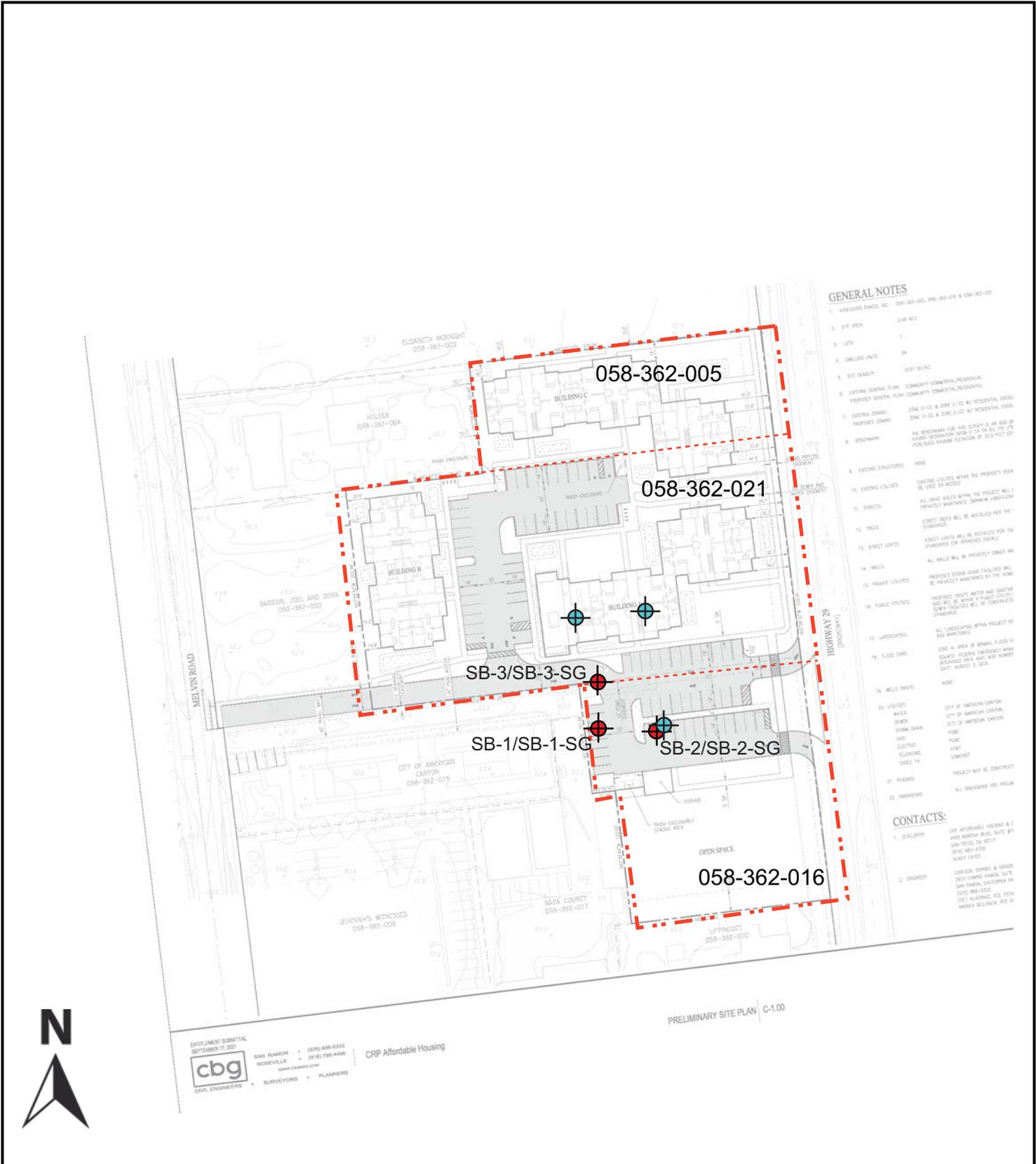
0 60 120
APPROXIMATE SCALE: 1" = 120'

AEI Consultants

SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 1
Project No. 442058



- GENERAL NOTES**
1. ADDRESS PARCEL NO. 058-362-005, 058-362-016 & 058-362-021
 2. SITE AREA 3.49 AC
 3. LOTS 1
 4. SHEET NO. 18
 5. SITE NUMBER 18870/AC
 6. EXISTING GENERAL PLAN CONSISTENCY (COMMERCIAL/RESIDENTIAL)
PROPOSED GENERAL PLAN CONSISTENCY (COMMERCIAL/RESIDENTIAL)
 7. EXISTING ZONING PROPOSED ZONING ZONE R-100 & ZONE R-100 (R) RESIDENTIAL OVERLY ZONE R-100 & ZONE R-100 (R) RESIDENTIAL OVERLY
 8. BENCHMARK THE BENCHMARK FOR THIS SURVEY IS AN ANGLE OF MEASUREMENT POINT D TO THE NE CORNER OF THE PUBLISHED MAPSHEET EXTENSION OF 25.0 FEET OF
 9. EXISTING UTILITIES NONE
 10. EXISTING UTILITIES EXISTING UTILITIES WITHIN THE PROPERTY BOUNDARY ARE SHOWN AS NOTED
 11. EXISTING UTILITIES ALL EXISTING UTILITIES WITHIN THE PROJECT WILL BE PROTECTED AND MAINTAINED THROUGH CONSTRUCTION
 12. UTILITIES EXISTING UTILITIES WILL BE PROTECTED PER THE STANDARDS OF APPROVED LOCAL AGENCIES
 13. STREET LIGHTS STREET LIGHTS WILL BE PROVIDED PER THE STANDARDS OF APPROVED LOCAL AGENCIES
 14. WALLS ALL WALLS WILL BE PRIVATELY OWNED AND MAINTAINED
 15. FUTURE UTILITIES PROPOSED FUTURE UTILITIES EXISTING UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 16. FUTURE UTILITIES PROPOSED FUTURE UTILITIES EXISTING UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 17. FUTURE UTILITIES PROPOSED FUTURE UTILITIES EXISTING UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 18. FUTURE UTILITIES PROPOSED FUTURE UTILITIES EXISTING UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 19. WELLS NONE
 20. UTILITIES CITY OF AMERICAN CANYON WATER CITY OF AMERICAN CANYON SEWER CITY OF AMERICAN CANYON STORM DRAIN PUBLIC PUBLIC GAS PUBLIC AT&T CONTACT PROJECT MAY BE CONDUCTED
 21. FUTURE UTILITIES PROPOSED FUTURE UTILITIES EXISTING UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 22. UTILITIES ALL UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
- CONTACTS:**
1. DEVELOPER CIP AFFORDABLE HOUSING & C 4400 NORTH AVENUE SUITE 200 SAN FRANCISCO, CA 94131 (415) 441-1100 (415) 441-1100
 2. ENGINEER CARLSON, HARPER & OGDEN 2855 CAMPUS BLVD SUITE 200 SAN FRANCISCO, CALIFORNIA 94131 (415) 884-0322 (415) 884-0322 (415) 884-0322 (415) 884-0322



ENTITLEMENT SUBMITTAL
SEPTEMBER 17, 2021

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DAVID BLANKEN • (925) 896-0322
ROSEVILLE • (916) 796-4456
WWW.CBGENGINEERS.COM

CRP Affordable Housing

LEGEND

- Approximate Property Boundary
- Approximate Soil, Groundwater, and Soil Gas Sample Location
- Proposed Sample Location

Basemap Source:
cbg Civil Engineers, Preliminary Site Plan C-1.00
September 17, 2021

AEI Consultants

SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 2
Project No. 442058

CONDITIONS / INSPECTIONS / COMMENTS

Application Type:	Soil Borings	File Date:	11/2/2021
Permit Number:	E21-00767	Issued Date:	11/3/2021
Parcel Number:	058-362-016-000	Expiration Date:	11/3/2023
Owner:	DAMBROSIO FRANK P JR ETAL TR	Phone:	(000) 000-0000
Applicant:	Natasha Budimirovic	Phone:	(408) 442-2605

CONDITIONS

Code:	Condition:
SB-1	In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following: 1)Compliance with the State of California Worker's Compensation Laws; 2)Compliance with the State and Federal Worker Health and Safety Laws; 3)Location of all underground and aboveground utilities which might be impacted by the proposed work; 4)Compliance with the Napa County and State of California well requirements; 5)Notification to Napa County PBES at least two (2) workdays before work is initiated; 6)Notification to Napa County within two (2) workdays of discovery of contaminated soil or ground water.
STRM-02	The owner shall comply with the Napa Countywide Stormwater Pollution Prevention Program, "Erosion and Sediment Control Measures for Construction Projects". Failure to comply with best management practices for erosion and sediment control will result in issuance of a stop-work order.

INSPECTIONS

Inspection Type:	Inspected By:	Inspection Date:
Destruction Inspection	Marcia Mcewen	11/3/2021

COMMENTS

Date:	Comment:
11/2/2021	Call 253-4135 at least 48 hours in advance during normal business hours to schedule inspection requests. Inspections are taken on a first-come-first-served basis so if you need a specific date and time be sure to call well in advance Any deviation from these permit specifications without prior approval from the Department of Environmental Management will be cause for stopping work until the changes are fully justified and approved. If a claim is to be submitted for a refund, per County Code, a 25% processing fee will be retained. Such claims must be made within one year of the date on the receipt.

**Monitoring Well/Soil Boring Permit Application
Napa County Planning, Building & Environmental Services**

Napa County Use Only
 FEE EXEMPT SITE: Y N
 If NO, FEE \$ _____
 Date _____ By _____
 Receipt # _____
 Permit # _____

Application for: Monitoring Wells Extraction Wells Other
 Cathodic Protection Wells Exploratory Hole (boring)
(Please check one)

Type of Investigation: Geotechnical Phase 2 LOP Other
(Please check one)

058-362-016

LOP SITE NUMBER

ASSESSOR'S PARCEL NUMBER

The following **MUST** be included before this permit application can be processed:

1. Assessor's Parcel Number
2. Well location map (showing both proposed and existing wells)
3. Permission document(s) (if required)
4. Encroachment permit(s) (if required)
5. Clearance from public agency(ies) (if required)

Site Name: **Vacant Land**

Property Owner: **Agent Bruce Peters**

Site Address: **APN: 058-362-016**

City: **American Canyon** Zip: **94503**

Owner's Mailing Address: **6484 Washington Street, Ste "A"** City: **Yountville,** Zip: **94599**

Drilling Contractor: **Environmental Control Associates**

Type of License: **C57 Drillers License**

Mailing Address: **3011 Twin Palms Drive**

License #: **695970**

City: **Aptos**

State: **California**

Zip: **94070**

Consultant: **AEI Consultants**

Telephone #:

Address: **2500 Camino Diablo**

City: **Walnut Creek**

State: **CA**

Zip: **94597**

Responsible Person at Site: **Natasha Budimirovic**

Cell Phone # **669-999-6118**

Type of Work

New Construction of wells - # of wells _____ Destruction of wells - # of wells _____
 Reconditioning of wells (reconstruct or repair) - - # of wells _____
 Wells currently on Site? - 0 - # of wells _____ New Construction of borings # of borings **1**

Reason for Well Installation (Check as many as apply):

Underground tank site: <input type="checkbox"/>	Surface Impoundment: <input type="checkbox"/>
Tanks Still Present: <input type="checkbox"/>	Landfill Site: <input type="checkbox"/>
Spill or Discharge Site: <input type="checkbox"/>	Cathodic Protection: <input type="checkbox"/>
Baseline Study: <input type="checkbox"/>	Other: <input type="checkbox"/>

Other Site Information:

Closest Distance to:

Septic System:

Sewer Line:

Water Wells:

Rivers, Creeks, or Lakes:

Underground Utilities:

Underground Storage Tanks:

Riparian Cover Permit Required? Yes No

Issued by the County Public Works Dept. *(Attach Copy)*

May apply to any site outside City limits and within 150 feet of a designated waterway.

**Permit Application
Page 2 of 2**

Well/Boring Location: Are all wells/borings covered by this application on a single parcel and not on adjoining parcels or public or utility rights-of-way? Yes No If **no**, list other parcels, public rights-of-way or utility rights-of-way.
Note: Each parcel with a new well or new boring must have a separate permit for that parcel.

1. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

2. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

3. Owner or R/W Owner:	Site Address:	APN:	
Owner address:	City:	State:	Zip:
Number of Wells:	Permission Document Attached:		

NOTE: For each parcel listed above which is under different ownership, a letter authorizing access and work on the property must be submitted. The letter must include address, Assessor's parcel number and the notarized signature of the owner or legal agent for the owner. If any wells are proposed on public or utility rights-of-way, a written clearance and/or encroachment permit must accompany application.

Well/Boring Construction

Bore Hole Diameter: 2.25 in	Maximum Depth: 20 feet	Annular Space:
Casing: Diameter:	Gauge:	Material:
Grout: Depth of Seal:	Type of Grout: Bentonite	
Conductor Casing: Yes <input type="checkbox"/> No <input type="checkbox"/>		

Check if wells are intended to be constructed into aquifers below the first encountered one. Indicate how cross contamination will be prevented on a separate sheet.

Well reconstruction and destruction applications must include a written description of work proposed and existing well information.

Disposal Methods

Soil Cuttings <input checked="" type="checkbox"/>	Development/Rinsate Water <input type="checkbox"/>
---	--

In applying for this permit, I understand that the drilling contractor and the consultant are responsible for the following:

- 1) Compliance with the State of California Worker's Compensation Laws;
- 2) Compliance with the State and Federal Worker Health and Safety Laws;
- 3) Location of all underground and aboveground utilities which might be impacted by the proposed work;
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- 5) Notification to Napa County PBES at least two (2) workdays before work is initiated,
- 6) Notification to Napa County within two (2) workdays of the discovery of contaminated soil or ground water and;
- 7) Filing a completed well log for each well within four (4) months of completion to Napa County and the State Department Water Resources.


10/29/2021

 Signature of Authorized Agent of Drilling Contractor Date

FOR OFFICIAL USE ONLY:
 Required certificate of current worker's compensation insurance is on file with DEM;
 Consultant: Exp. Date: _____ Confirmed: _____
 Contractor: Exp. Date: _____ Confirmed: _____

Permit Issued by: _____ Date: _____

Permit is valid for one (1) year from date of issuance.

PLANS APPROVED
Division of Environmental Health
COUNTY OF NAPA

By: *PM* Date: 11/3/2021



LEGEND

- Approximate Property Boundary
- ⊕ Approximate Soil, Groundwater, and Soil Gas Sample Location
- ⊕ Proposed Sample Location

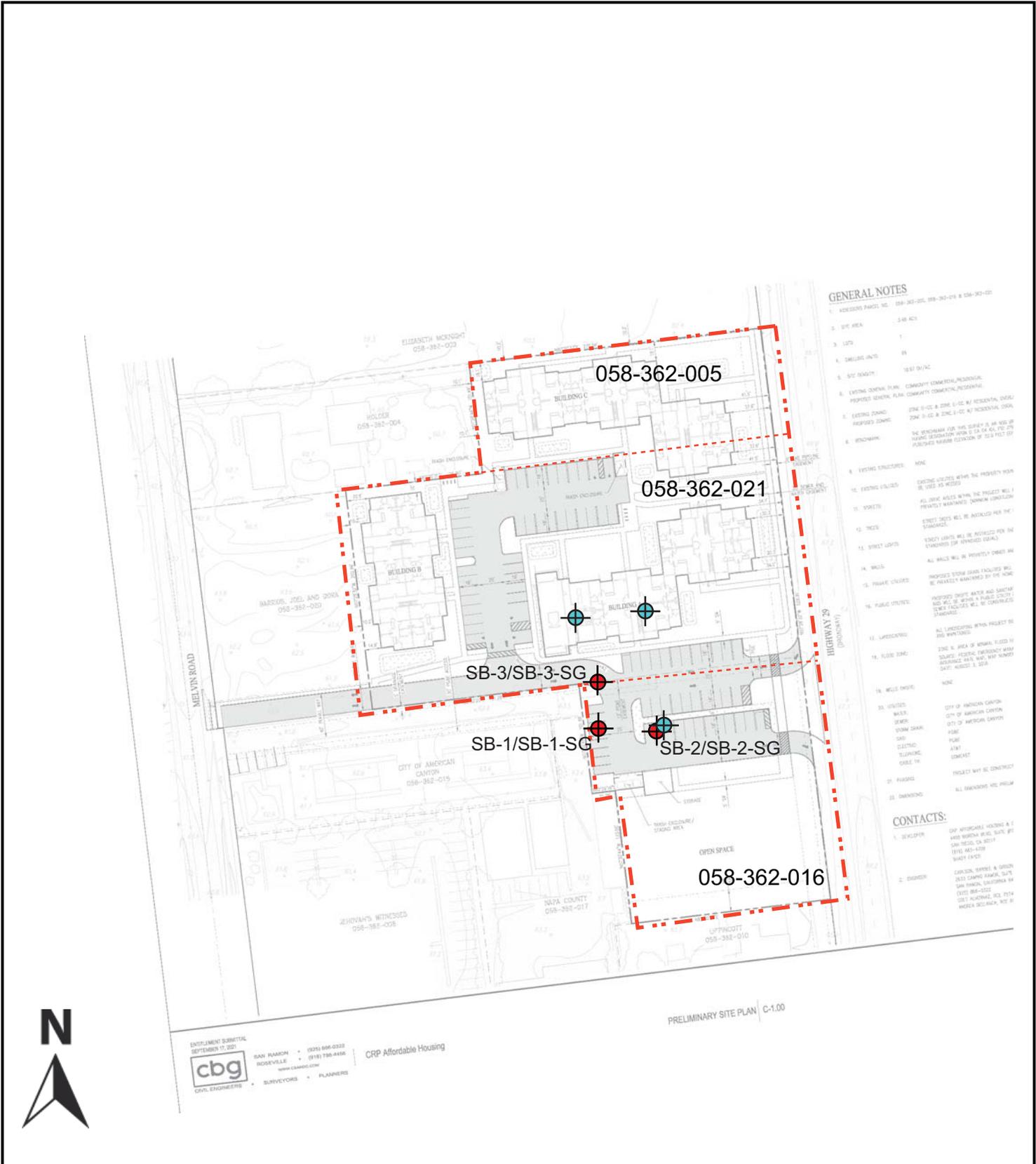


AEI Consultants

SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 1
Project No. 442058



- GENERAL NOTES**
1. ADDRESS PARCEL NO. 058-362-005, 058-362-016 & 058-362-021
 2. SITE AREA 3.49 AC
 3. LOTS 1
 4. SHELLS UNITS 88
 5. SITE RENTY 1887 DU/AC
 6. EXISTING GENERAL PLAN CONSISTENT COMMERCIAL/PRESIDENTIAL
PROPOSED GENERAL PLAN CONSISTENT COMMERCIAL/PRESIDENTIAL
 7. EXISTING ZONING PROPOSED ZONING ZONE R-100 & ZONE R-100 AT RESIDENTIAL OVERLY ZONE R-100 & ZONE R-100 AT RESIDENTIAL OVERLY
 8. BENCHMARK THE BENCHMARK FOR THIS SURVEY IS AN ANGLE OF BEARING ESTABLISHED FROM A TO OR AN ANGLE TO A PUBLISHED NAD83 ELEVATION OF 25.9 FEET OF
 9. EXISTING STRUCTURES NONE
 10. EXISTING UTILITIES EXISTING UTILITIES WITHIN THE PROPERTY BOUNDARY ARE SHOWN AS NOTED
 11. UTILITIES ALL UTILITY LINES WITHIN THE PROJECT WILL BE PROTECTED AND MAINTAINED THROUGH CONSTRUCTION
 12. TREES EXISTING TREES WILL BE PROTECTED PER THE STANDARDS OF PRACTICE
 13. STREET LIGHTS STREET LIGHTS WILL BE PROVIDED PER THE STANDARDS OF PRACTICE
 14. WALLS ALL WALLS WILL BE PRIVATELY OWNED AND MAINTAINED
 15. FUTURE UTILITIES PROPOSED FUTURE UTILITIES WILL BE PRIVATELY MAINTAINED BY THE HOME OWNER
 16. PUBLIC UTILITIES PROPOSED FUTURE WATER AND SANITARY SEWER FACILITIES WILL BE CONSTRUCTED AND MAINTAINED PER THE STANDARDS OF PRACTICE
 17. LANDSCAPING ALL LANDSCAPING WITHIN PROJECT TO BE MAINTAINED
 18. FLOOD ZONE ZONE 4 AREA OF SPECIAL FLOOD HAZARD (SFHA) ZONE 4 AREA OF SPECIAL FLOOD HAZARD (SFHA) DATE: AUGUST 3, 2018
 19. WELLS NONE
 20. UTILITIES CITY OF AMERICAN CANYON WATER CITY OF AMERICAN CANYON SEWER CITY OF AMERICAN CANYON PHONE 562-422-1111 TELEPHONE 562-422-1111 CONTACT PROJECT MAY BE CONDUCTED
 21. FLOODING PROJECT MAY BE CONDUCTED
 22. DIMENSIONS ALL DIMENSIONS ARE PER PLAN
- CONTACTS:**
1. DEVELOPER CBG AFFORDABLE HOUSING & C 4400 NORTH BRUCE BLVD, SUITE 200 SAN JOSE, CA 95131 (408) 441-1100 (408) 441-1100
 2. ENGINEER CAROLYN HARPER & ORSON 2833 CAMPUS BLVD, SUITE 200 SAN FRANCISCO, CALIFORNIA 94116 (415) 884-0322 (415) 884-0322 (415) 884-0322 (415) 884-0322



ENTITLEMENT SUBMITTAL
SEPTEMBER 17, 2021

cbg
CIVIL ENGINEERS • SURVEYORS • PLANNERS

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WWW.CBGENGINEERS.COM

CRP Affordable Housing

LEGEND

- Approximate Property Boundary
- Approximate Soil, Groundwater, and Soil Gas Sample Location
- Proposed Sample Location

Basemap Source:
cbg Civil Engineers, Preliminary Site Plan C-1.00
September 17, 2021

AEI Consultants

SITE MAP

American Canyon
Apartment Property
Broadway Street
American Canyon, California

FIGURE 2
Project No. 442058

APPENDIX B
GEOPHYSICAL SURVEY REPORT



GPR Summary Report

Project Name: AmericanCanyon-AEI

Survey Date: 2021-06-22

Report Date: 2021-06-28

Client: AEI

Site Description: The site is a mostly dirt and grass area next to a tennis court at its southwestern edge and adjacent to a busy road, highway 29 running north south on its eastern border. Some trees and shrubs as well as cement bases are partially visible. Client marked out specific areas to scan using orange pin flags for boundaries. Foresite was asked to ascertain if underground storage tanks (UST) were present or suggest where they may have been removed. To this end we used reflective induction (RI) to mark any mass anomalies. We scanned the entire site in a north south and east west pattern of approximately 5 feet intervals. Next we connected to electrical cables to trace to meter from pole using electromagnetic field (EMF) connection methods. Scanning the entire site for passive signals we determined a gas line and water and sewer lines were present adjacent to eastern side of property limits. Using ground penetrating radar (GPR) we then scanned the area for a better profile of soils disturbances and buried objects. Where there was reinforced concrete or shrubs we could not scan. No typical signatures were witnessed suggesting possible UST's. The only area resembling disturbance signs were at the southwestern section, note figures 1,2,3, marked on map with yellow dots. Other indicators were at south central area, marked with coral box. It is possible other items were excavated many years ago leaving little trace for our discovery.

Additional Comments: The instruments used in this study were in good working order and performed to manufacturers standards. Conditions were good for our study with some obstacles and rough ground creating poorer reflections. Present on site were Client and Simon Taylor from Foresite, who composed this report.

Screenshot_1.jpg

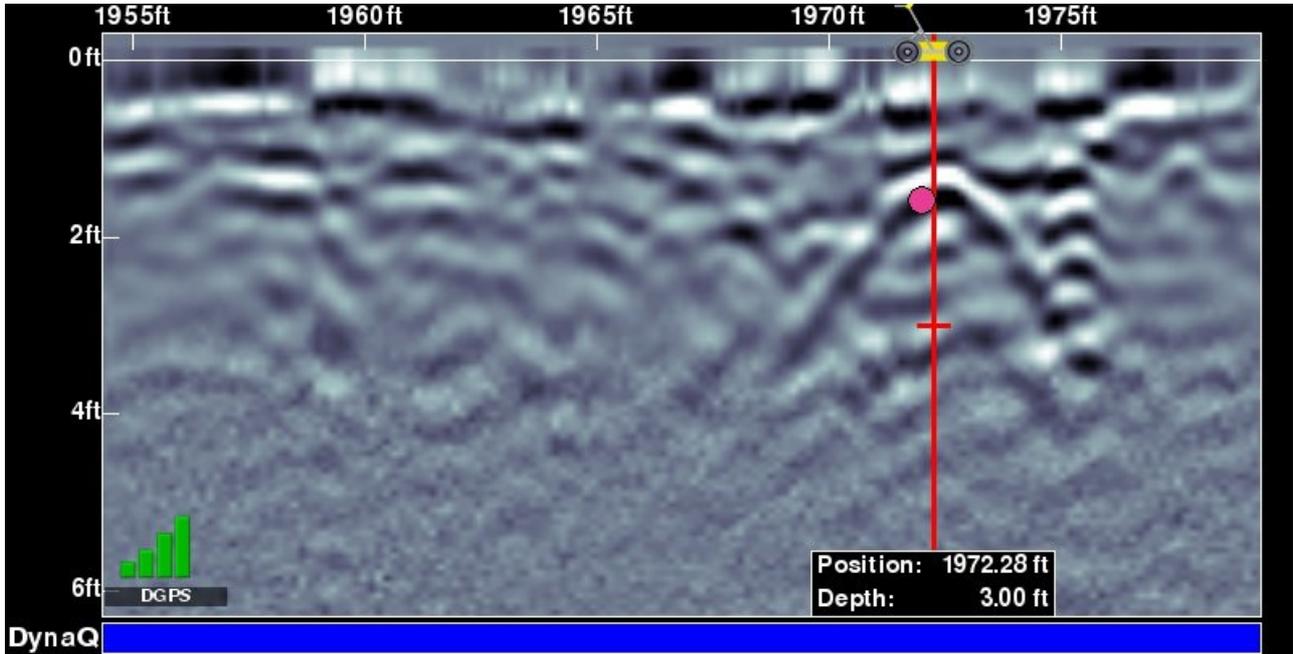


Figure 1

Screenshot_2.jpg

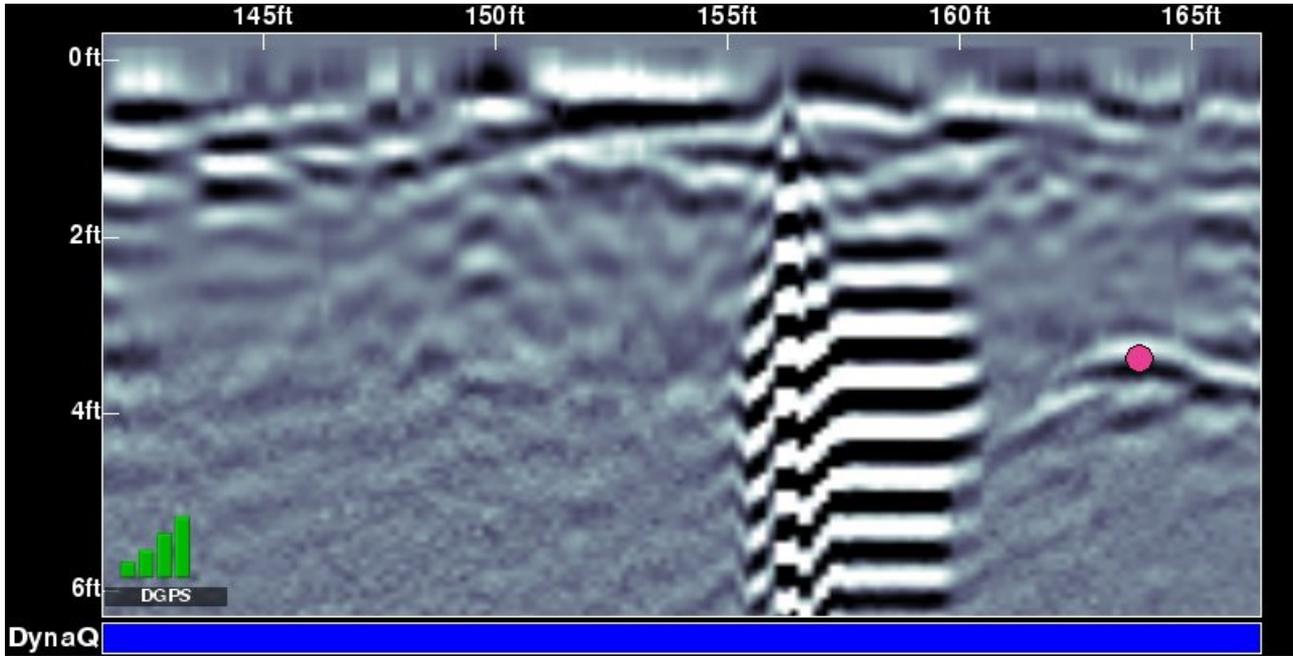


Figure 2

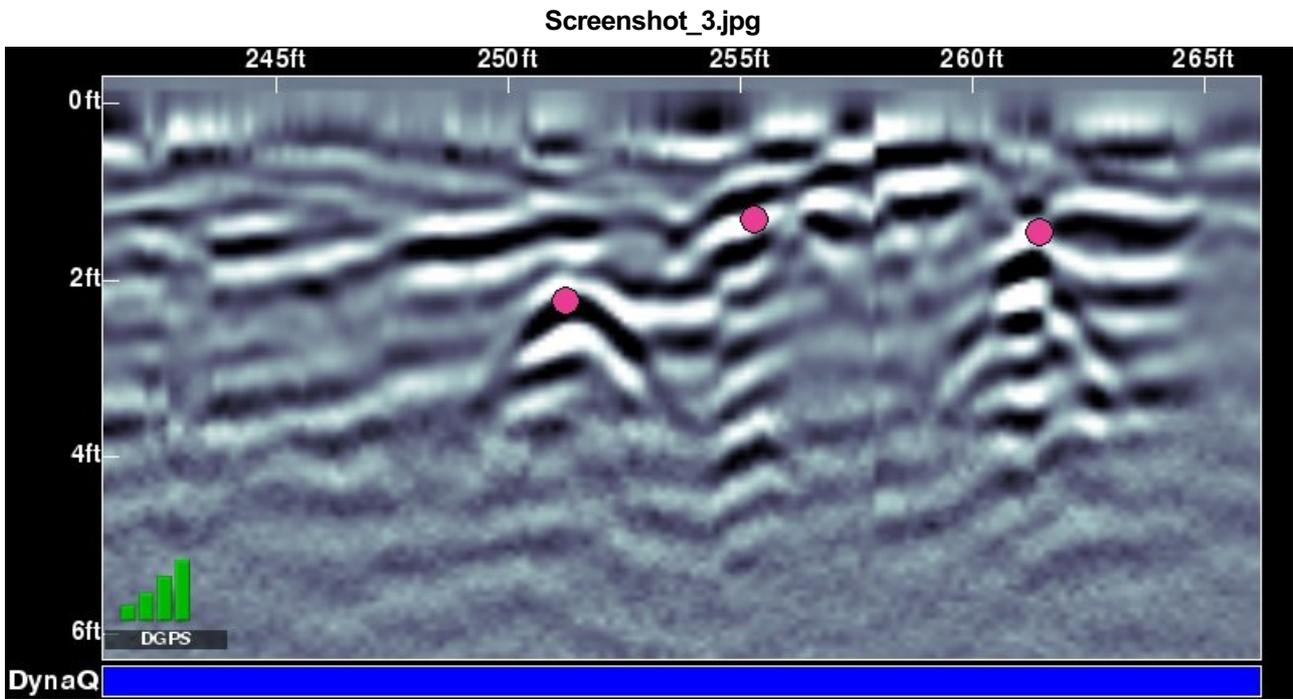


Figure 3

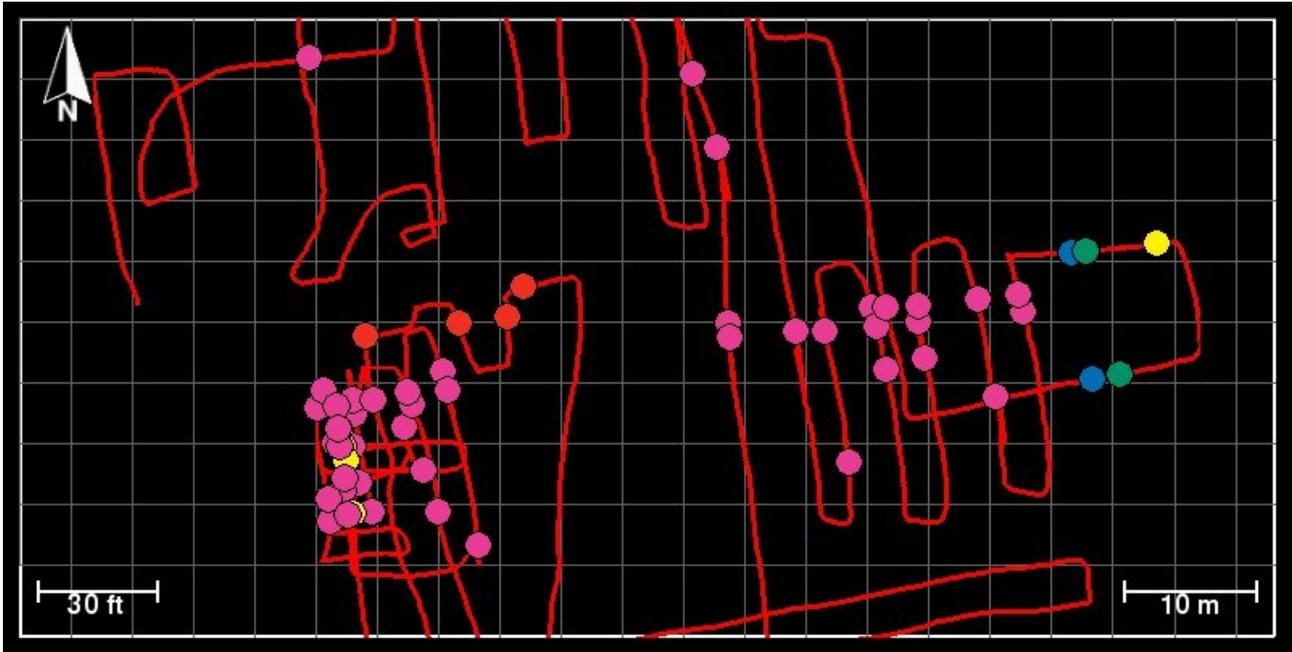


Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

line1-profile.png

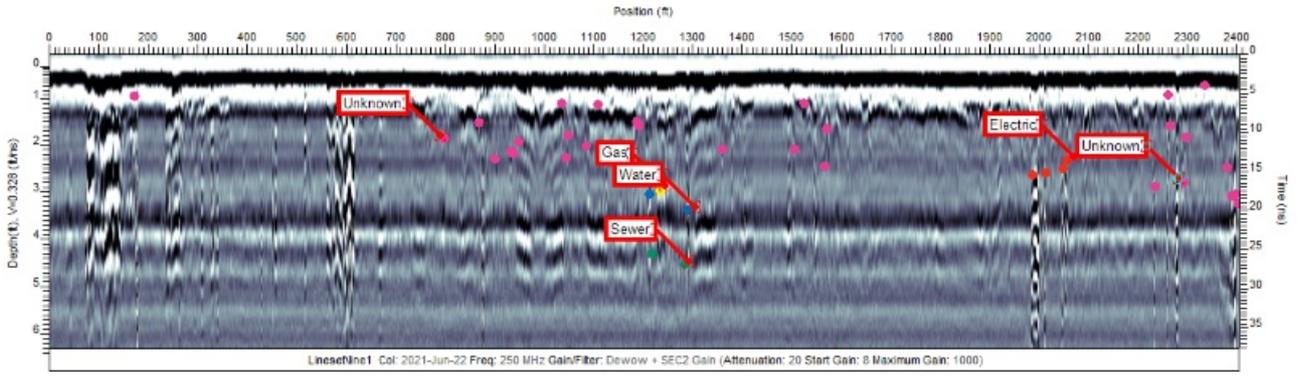


Figure 10

line2-profile.png

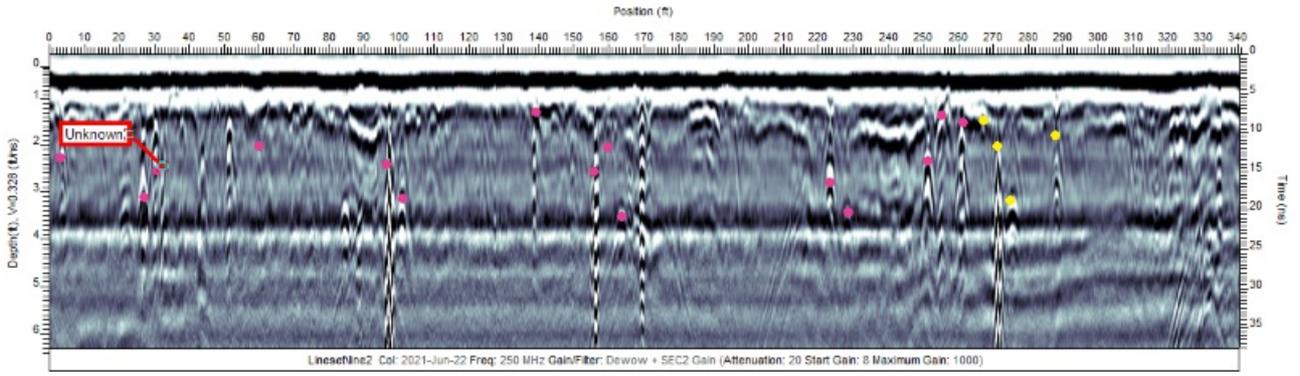


Figure 11

APPENDIX C
BORING LOGS

APPENDIX D
LABORATORY ANALYTICAL REPORTS



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2106G20

Report Created for: AEI Consultants

3880 S. Bascom Ave, Suite 109
San Jose, CA 95124

Project Contact: Natasha Budimirovic

Project P.O.: 264394

Project: 442058; American Canyon

Project Received: 06/25/2021

Analytical Report reviewed & approved for release on 07/12/2021 by:

Angela Rydelius
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 442058; American Canyon
WorkOrder: 2106G20

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 442058; American Canyon
WorkOrder: 2106G20

Analytical Qualifiers

H Samples were analyzed out of hold time
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
b1 Aqueous sample that contains greater than ~1 vol. % sediment
e2 Diesel range compounds are detected; no recognizable pattern
e7 Oil range compounds are detected.

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	GC28 07072110.D	224421

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.20	1	07/07/2021 14:31
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/07/2021 14:31
Benzene	ND	0.0050	1	07/07/2021 14:31
Bromobenzene	ND	0.0050	1	07/07/2021 14:31
Bromochloromethane	ND	0.0050	1	07/07/2021 14:31
Bromodichloromethane	ND	0.0050	1	07/07/2021 14:31
Bromoform	ND	0.0050	1	07/07/2021 14:31
Bromomethane	ND	0.0050	1	07/07/2021 14:31
2-Butanone (MEK)	ND	0.050	1	07/07/2021 14:31
t-Butyl alcohol (TBA)	ND	0.050	1	07/07/2021 14:31
n-Butyl benzene	ND	0.0050	1	07/07/2021 14:31
sec-Butyl benzene	ND	0.0050	1	07/07/2021 14:31
tert-Butyl benzene	ND	0.0050	1	07/07/2021 14:31
Carbon Disulfide	ND	0.0050	1	07/07/2021 14:31
Carbon Tetrachloride	ND	0.0050	1	07/07/2021 14:31
Chlorobenzene	ND	0.0050	1	07/07/2021 14:31
Chloroethane	ND	0.0050	1	07/07/2021 14:31
Chloroform	ND	0.0050	1	07/07/2021 14:31
Chloromethane	ND	0.0050	1	07/07/2021 14:31
2-Chlorotoluene	ND	0.0050	1	07/07/2021 14:31
4-Chlorotoluene	ND	0.0050	1	07/07/2021 14:31
Dibromochloromethane	ND	0.0050	1	07/07/2021 14:31
1,2-Dibromo-3-chloropropane	ND	0.00050	1	07/07/2021 14:31
1,2-Dibromoethane (EDB)	ND	0.00025	1	07/07/2021 14:31
Dibromomethane	ND	0.0050	1	07/07/2021 14:31
1,2-Dichlorobenzene	ND	0.0050	1	07/07/2021 14:31
1,3-Dichlorobenzene	ND	0.0050	1	07/07/2021 14:31
1,4-Dichlorobenzene	ND	0.0050	1	07/07/2021 14:31
Dichlorodifluoromethane	ND	0.0050	1	07/07/2021 14:31
1,1-Dichloroethane	ND	0.0050	1	07/07/2021 14:31
1,2-Dichloroethane (1,2-DCA)	ND	0.00010	1	07/07/2021 14:31
1,1-Dichloroethene	ND	0.0050	1	07/07/2021 14:31
cis-1,2-Dichloroethene	ND	0.0050	1	07/07/2021 14:31
trans-1,2-Dichloroethene	ND	0.0050	1	07/07/2021 14:31
1,2-Dichloropropane	ND	0.0050	1	07/07/2021 14:31
1,3-Dichloropropane	ND	0.0050	1	07/07/2021 14:31
2,2-Dichloropropane	ND	0.0050	1	07/07/2021 14:31

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	GC28 07072110.D	224421

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/07/2021 14:31
cis-1,3-Dichloropropene	ND	0.0050	1	07/07/2021 14:31
trans-1,3-Dichloropropene	ND	0.0050	1	07/07/2021 14:31
Diisopropyl ether (DIPE)	ND	0.0050	1	07/07/2021 14:31
Ethylbenzene	ND	0.0050	1	07/07/2021 14:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/07/2021 14:31
Freon 113	ND	0.0050	1	07/07/2021 14:31
Hexachlorobutadiene	ND	0.0050	1	07/07/2021 14:31
Hexachloroethane	ND	0.0050	1	07/07/2021 14:31
2-Hexanone	ND	0.0050	1	07/07/2021 14:31
Isopropylbenzene	ND	0.0050	1	07/07/2021 14:31
4-Isopropyl toluene	ND	0.0050	1	07/07/2021 14:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/07/2021 14:31
Methylene chloride	ND	0.020	1	07/07/2021 14:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/07/2021 14:31
Naphthalene	ND	0.0050	1	07/07/2021 14:31
n-Propyl benzene	ND	0.0050	1	07/07/2021 14:31
Styrene	ND	0.0050	1	07/07/2021 14:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/07/2021 14:31
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/07/2021 14:31
Tetrachloroethene	ND	0.0050	1	07/07/2021 14:31
Toluene	ND	0.0050	1	07/07/2021 14:31
1,2,3-Trichlorobenzene	ND	0.0050	1	07/07/2021 14:31
1,2,4-Trichlorobenzene	ND	0.0050	1	07/07/2021 14:31
1,1,1-Trichloroethane	ND	0.0050	1	07/07/2021 14:31
1,1,2-Trichloroethane	ND	0.0050	1	07/07/2021 14:31
Trichloroethene	ND	0.0050	1	07/07/2021 14:31
Trichlorofluoromethane	ND	0.0050	1	07/07/2021 14:31
1,2,3-Trichloropropane	ND	0.00025	1	07/07/2021 14:31
1,2,4-Trimethylbenzene	ND	0.0050	1	07/07/2021 14:31
1,3,5-Trimethylbenzene	ND	0.0050	1	07/07/2021 14:31
Vinyl Chloride	ND	0.00025	1	07/07/2021 14:31
m,p-Xylene	ND	0.0050	1	07/07/2021 14:31
o-Xylene	ND	0.0050	1	07/07/2021 14:31
Xylenes, Total	ND	0.0050	1	07/07/2021 14:31

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	GC28 07072110.D	224421

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	110		70-140	07/07/2021 14:31
Toluene-d8	115		70-140	07/07/2021 14:31
4-BFB	99		70-140	07/07/2021 14:31
Benzene-d6	85		50-140	07/07/2021 14:31
Ethylbenzene-d10	102		50-140	07/07/2021 14:31
1,2-DCB-d4	73		40-140	07/07/2021 14:31

Analyst(s): TW



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	GC28 07072111.D	224421

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.20	1	07/07/2021 15:21
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/07/2021 15:21
Benzene	ND	0.0050	1	07/07/2021 15:21
Bromobenzene	ND	0.0050	1	07/07/2021 15:21
Bromochloromethane	ND	0.0050	1	07/07/2021 15:21
Bromodichloromethane	ND	0.0050	1	07/07/2021 15:21
Bromoform	ND	0.0050	1	07/07/2021 15:21
Bromomethane	ND	0.0050	1	07/07/2021 15:21
2-Butanone (MEK)	ND	0.050	1	07/07/2021 15:21
t-Butyl alcohol (TBA)	ND	0.050	1	07/07/2021 15:21
n-Butyl benzene	ND	0.0050	1	07/07/2021 15:21
sec-Butyl benzene	ND	0.0050	1	07/07/2021 15:21
tert-Butyl benzene	ND	0.0050	1	07/07/2021 15:21
Carbon Disulfide	ND	0.0050	1	07/07/2021 15:21
Carbon Tetrachloride	ND	0.0050	1	07/07/2021 15:21
Chlorobenzene	ND	0.0050	1	07/07/2021 15:21
Chloroethane	ND	0.0050	1	07/07/2021 15:21
Chloroform	ND	0.0050	1	07/07/2021 15:21
Chloromethane	ND	0.0050	1	07/07/2021 15:21
2-Chlorotoluene	ND	0.0050	1	07/07/2021 15:21
4-Chlorotoluene	ND	0.0050	1	07/07/2021 15:21
Dibromochloromethane	ND	0.0050	1	07/07/2021 15:21
1,2-Dibromo-3-chloropropane	ND	0.00050	1	07/07/2021 15:21
1,2-Dibromoethane (EDB)	ND	0.00025	1	07/07/2021 15:21
Dibromomethane	ND	0.0050	1	07/07/2021 15:21
1,2-Dichlorobenzene	ND	0.0050	1	07/07/2021 15:21
1,3-Dichlorobenzene	ND	0.0050	1	07/07/2021 15:21
1,4-Dichlorobenzene	ND	0.0050	1	07/07/2021 15:21
Dichlorodifluoromethane	ND	0.0050	1	07/07/2021 15:21
1,1-Dichloroethane	ND	0.0050	1	07/07/2021 15:21
1,2-Dichloroethane (1,2-DCA)	ND	0.00010	1	07/07/2021 15:21
1,1-Dichloroethene	ND	0.0050	1	07/07/2021 15:21
cis-1,2-Dichloroethene	ND	0.0050	1	07/07/2021 15:21
trans-1,2-Dichloroethene	ND	0.0050	1	07/07/2021 15:21
1,2-Dichloropropane	ND	0.0050	1	07/07/2021 15:21
1,3-Dichloropropane	ND	0.0050	1	07/07/2021 15:21
2,2-Dichloropropane	ND	0.0050	1	07/07/2021 15:21

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	GC28 07072111.D	224421

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/07/2021 15:21
cis-1,3-Dichloropropene	ND	0.0050	1	07/07/2021 15:21
trans-1,3-Dichloropropene	ND	0.0050	1	07/07/2021 15:21
Diisopropyl ether (DIPE)	ND	0.0050	1	07/07/2021 15:21
Ethylbenzene	ND	0.0050	1	07/07/2021 15:21
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/07/2021 15:21
Freon 113	ND	0.0050	1	07/07/2021 15:21
Hexachlorobutadiene	ND	0.0050	1	07/07/2021 15:21
Hexachloroethane	ND	0.0050	1	07/07/2021 15:21
2-Hexanone	ND	0.0050	1	07/07/2021 15:21
Isopropylbenzene	ND	0.0050	1	07/07/2021 15:21
4-Isopropyl toluene	ND	0.0050	1	07/07/2021 15:21
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/07/2021 15:21
Methylene chloride	ND	0.020	1	07/07/2021 15:21
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/07/2021 15:21
Naphthalene	ND	0.0050	1	07/07/2021 15:21
n-Propyl benzene	ND	0.0050	1	07/07/2021 15:21
Styrene	ND	0.0050	1	07/07/2021 15:21
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/07/2021 15:21
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/07/2021 15:21
Tetrachloroethene	ND	0.0050	1	07/07/2021 15:21
Toluene	ND	0.0050	1	07/07/2021 15:21
1,2,3-Trichlorobenzene	ND	0.0050	1	07/07/2021 15:21
1,2,4-Trichlorobenzene	ND	0.0050	1	07/07/2021 15:21
1,1,1-Trichloroethane	ND	0.0050	1	07/07/2021 15:21
1,1,2-Trichloroethane	ND	0.0050	1	07/07/2021 15:21
Trichloroethene	ND	0.0050	1	07/07/2021 15:21
Trichlorofluoromethane	ND	0.0050	1	07/07/2021 15:21
1,2,3-Trichloropropane	ND	0.00025	1	07/07/2021 15:21
1,2,4-Trimethylbenzene	ND	0.0050	1	07/07/2021 15:21
1,3,5-Trimethylbenzene	ND	0.0050	1	07/07/2021 15:21
Vinyl Chloride	ND	0.00025	1	07/07/2021 15:21
m,p-Xylene	ND	0.0050	1	07/07/2021 15:21
o-Xylene	ND	0.0050	1	07/07/2021 15:21
Xylenes, Total	ND	0.0050	1	07/07/2021 15:21

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	GC28 07072111.D	224421

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	108	70-140		07/07/2021 15:21
Toluene-d8	111	70-140		07/07/2021 15:21
4-BFB	101	70-140		07/07/2021 15:21
Benzene-d6	80	50-140		07/07/2021 15:21
Ethylbenzene-d10	96	50-140		07/07/2021 15:21
1,2-DCB-d4	68	40-140		07/07/2021 15:21

Analyst(s): TW



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	GC18 07092114.D	224421

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.20	1	07/09/2021 16:45
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/09/2021 16:45
Benzene	ND	0.0050	1	07/09/2021 16:45
Bromobenzene	ND	0.0050	1	07/09/2021 16:45
Bromochloromethane	ND	0.0050	1	07/09/2021 16:45
Bromodichloromethane	ND	0.0050	1	07/09/2021 16:45
Bromoform	ND	0.0050	1	07/09/2021 16:45
Bromomethane	ND	0.0050	1	07/09/2021 16:45
2-Butanone (MEK)	ND	0.050	1	07/09/2021 16:45
t-Butyl alcohol (TBA)	ND	0.050	1	07/09/2021 16:45
n-Butyl benzene	ND	0.0050	1	07/09/2021 16:45
sec-Butyl benzene	ND	0.0050	1	07/09/2021 16:45
tert-Butyl benzene	ND	0.0050	1	07/09/2021 16:45
Carbon Disulfide	ND	0.0050	1	07/09/2021 16:45
Carbon Tetrachloride	ND	0.0050	1	07/09/2021 16:45
Chlorobenzene	ND	0.0050	1	07/09/2021 16:45
Chloroethane	ND	0.0050	1	07/09/2021 16:45
Chloroform	ND	0.0050	1	07/09/2021 16:45
Chloromethane	ND	0.0050	1	07/09/2021 16:45
2-Chlorotoluene	ND	0.0050	1	07/09/2021 16:45
4-Chlorotoluene	ND	0.0050	1	07/09/2021 16:45
Dibromochloromethane	ND	0.0050	1	07/09/2021 16:45
1,2-Dibromo-3-chloropropane	ND	0.00050	1	07/09/2021 16:45
1,2-Dibromoethane (EDB)	ND	0.00025	1	07/09/2021 16:45
Dibromomethane	ND	0.0050	1	07/09/2021 16:45
1,2-Dichlorobenzene	ND	0.0050	1	07/09/2021 16:45
1,3-Dichlorobenzene	ND	0.0050	1	07/09/2021 16:45
1,4-Dichlorobenzene	ND	0.0050	1	07/09/2021 16:45
Dichlorodifluoromethane	ND	0.0050	1	07/09/2021 16:45
1,1-Dichloroethane	ND	0.0050	1	07/09/2021 16:45
1,2-Dichloroethane (1,2-DCA)	ND	0.00010	1	07/09/2021 16:45
1,1-Dichloroethene	ND	0.0050	1	07/09/2021 16:45
cis-1,2-Dichloroethene	ND	0.0050	1	07/09/2021 16:45
trans-1,2-Dichloroethene	ND	0.0050	1	07/09/2021 16:45
1,2-Dichloropropane	ND	0.0050	1	07/09/2021 16:45
1,3-Dichloropropane	ND	0.0050	1	07/09/2021 16:45
2,2-Dichloropropane	ND	0.0050	1	07/09/2021 16:45

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	GC18 07092114.D	224421

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/09/2021 16:45
cis-1,3-Dichloropropene	ND	0.0050	1	07/09/2021 16:45
trans-1,3-Dichloropropene	ND	0.0050	1	07/09/2021 16:45
Diisopropyl ether (DIPE)	ND	0.0050	1	07/09/2021 16:45
Ethylbenzene	ND	0.0050	1	07/09/2021 16:45
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/09/2021 16:45
Freon 113	ND	0.0050	1	07/09/2021 16:45
Hexachlorobutadiene	ND	0.0050	1	07/09/2021 16:45
Hexachloroethane	ND	0.0050	1	07/09/2021 16:45
2-Hexanone	ND	0.0050	1	07/09/2021 16:45
Isopropylbenzene	ND	0.0050	1	07/09/2021 16:45
4-Isopropyl toluene	ND	0.0050	1	07/09/2021 16:45
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/09/2021 16:45
Methylene chloride	ND	0.020	1	07/09/2021 16:45
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/09/2021 16:45
Naphthalene	ND	0.0050	1	07/09/2021 16:45
n-Propyl benzene	ND	0.0050	1	07/09/2021 16:45
Styrene	ND	0.0050	1	07/09/2021 16:45
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/09/2021 16:45
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/09/2021 16:45
Tetrachloroethene	ND	0.0050	1	07/09/2021 16:45
Toluene	ND	0.0050	1	07/09/2021 16:45
1,2,3-Trichlorobenzene	ND	0.0050	1	07/09/2021 16:45
1,2,4-Trichlorobenzene	ND	0.0050	1	07/09/2021 16:45
1,1,1-Trichloroethane	ND	0.0050	1	07/09/2021 16:45
1,1,2-Trichloroethane	ND	0.0050	1	07/09/2021 16:45
Trichloroethene	ND	0.0050	1	07/09/2021 16:45
Trichlorofluoromethane	ND	0.0050	1	07/09/2021 16:45
1,2,3-Trichloropropane	ND	0.00025	1	07/09/2021 16:45
1,2,4-Trimethylbenzene	ND	0.0050	1	07/09/2021 16:45
1,3,5-Trimethylbenzene	ND	0.0050	1	07/09/2021 16:45
Vinyl Chloride	ND	0.00025	1	07/09/2021 16:45
m,p-Xylene	ND	0.0050	1	07/09/2021 16:45
o-Xylene	ND	0.0050	1	07/09/2021 16:45
Xylenes, Total	ND	0.0050	1	07/09/2021 16:45

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	GC18 07092114.D	224421

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	107	70-140		07/09/2021 16:45
Toluene-d8	115	70-140		07/09/2021 16:45
4-BFB	91	70-140		07/09/2021 16:45
Benzene-d6	83	50-140		07/09/2021 16:45
Ethylbenzene-d10	101	50-140		07/09/2021 16:45
1,2-DCB-d4	76	40-140		07/09/2021 16:45

Analyst(s): LT



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-GW	2106G20-016B	Water	06/25/2021 10:57	GC16 07112119.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Acetone	ND	H	40	1	07/11/2021 23:51
tert-Amyl methyl ether (TAME)	ND	H	0.50	1	07/11/2021 23:51
Benzene	ND	H	0.20	1	07/11/2021 23:51
Bromobenzene	ND	H	0.50	1	07/11/2021 23:51
Bromochloromethane	ND	H	0.50	1	07/11/2021 23:51
Bromodichloromethane	ND	H	0.050	1	07/11/2021 23:51
Bromoform	ND	H	0.50	1	07/11/2021 23:51
Bromomethane	ND	H	0.50	1	07/11/2021 23:51
2-Butanone (MEK)	ND	H	5.0	1	07/11/2021 23:51
t-Butyl alcohol (TBA)	ND	H	5.0	1	07/11/2021 23:51
n-Butyl benzene	ND	H	0.50	1	07/11/2021 23:51
sec-Butyl benzene	ND	H	0.50	1	07/11/2021 23:51
tert-Butyl benzene	ND	H	0.50	1	07/11/2021 23:51
Carbon Disulfide	ND	H	0.50	1	07/11/2021 23:51
Carbon Tetrachloride	ND	H	0.050	1	07/11/2021 23:51
Chlorobenzene	ND	H	0.50	1	07/11/2021 23:51
Chloroethane	ND	H	0.50	1	07/11/2021 23:51
Chloroform	ND	H	0.10	1	07/11/2021 23:51
Chloromethane	ND	H	0.50	1	07/11/2021 23:51
2-Chlorotoluene	ND	H	0.50	1	07/11/2021 23:51
4-Chlorotoluene	ND	H	0.50	1	07/11/2021 23:51
Dibromochloromethane	ND	H	0.15	1	07/11/2021 23:51
1,2-Dibromo-3-chloropropane	ND	H	0.020	1	07/11/2021 23:51
1,2-Dibromoethane (EDB)	ND	H	0.040	1	07/11/2021 23:51
Dibromomethane	ND	H	0.50	1	07/11/2021 23:51
1,2-Dichlorobenzene	ND	H	0.50	1	07/11/2021 23:51
1,3-Dichlorobenzene	ND	H	0.50	1	07/11/2021 23:51
1,4-Dichlorobenzene	ND	H	0.50	1	07/11/2021 23:51
Dichlorodifluoromethane	ND	H	0.50	1	07/11/2021 23:51
1,1-Dichloroethane	ND	H	0.50	1	07/11/2021 23:51
1,2-Dichloroethane (1,2-DCA)	ND	H	0.020	1	07/11/2021 23:51
1,1-Dichloroethene	ND	H	0.010	1	07/11/2021 23:51
cis-1,2-Dichloroethene	ND	H	0.50	1	07/11/2021 23:51
trans-1,2-Dichloroethene	ND	H	0.50	1	07/11/2021 23:51
1,2-Dichloropropane	ND	H	0.20	1	07/11/2021 23:51
1,3-Dichloropropane	ND	H	0.50	1	07/11/2021 23:51
2,2-Dichloropropane	ND	H	0.50	1	07/11/2021 23:51

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-GW	2106G20-016B	Water	06/25/2021 10:57	GC16 07112119.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	H	0.50	1	07/11/2021 23:51
cis-1,3-Dichloropropene	ND	H	0.50	1	07/11/2021 23:51
trans-1,3-Dichloropropene	ND	H	0.50	1	07/11/2021 23:51
Diisopropyl ether (DIPE)	ND	H	0.50	1	07/11/2021 23:51
Ethylbenzene	ND	H	0.50	1	07/11/2021 23:51
Ethyl tert-butyl ether (ETBE)	ND	H	0.50	1	07/11/2021 23:51
Freon 113	ND	H	0.50	1	07/11/2021 23:51
Hexachlorobutadiene	ND	H	0.50	1	07/11/2021 23:51
Hexachloroethane	ND	H	0.20	1	07/11/2021 23:51
2-Hexanone	ND	H	0.50	1	07/11/2021 23:51
Isopropylbenzene	ND	H	0.50	1	07/11/2021 23:51
4-Isopropyl toluene	ND	H	0.50	1	07/11/2021 23:51
Methyl-t-butyl ether (MTBE)	ND	H	0.50	1	07/11/2021 23:51
Methylene chloride	ND	H	2.0	1	07/11/2021 23:51
4-Methyl-2-pentanone (MIBK)	ND	H	0.50	1	07/11/2021 23:51
Naphthalene	ND	H	0.30	1	07/11/2021 23:51
n-Propyl benzene	ND	H	0.50	1	07/11/2021 23:51
Styrene	ND	H	2.0	1	07/11/2021 23:51
1,1,1,2-Tetrachloroethane	ND	H	0.50	1	07/11/2021 23:51
1,1,2,2-Tetrachloroethane	ND	H	0.020	1	07/11/2021 23:51
Tetrachloroethene	ND	H	0.20	1	07/11/2021 23:51
Toluene	ND	H	0.50	1	07/11/2021 23:51
1,2,3-Trichlorobenzene	ND	H	0.50	1	07/11/2021 23:51
1,2,4-Trichlorobenzene	ND	H	0.50	1	07/11/2021 23:51
1,1,1-Trichloroethane	ND	H	0.50	1	07/11/2021 23:51
1,1,2-Trichloroethane	ND	H	0.20	1	07/11/2021 23:51
Trichloroethene	ND	H	0.50	1	07/11/2021 23:51
Trichlorofluoromethane	ND	H	0.50	1	07/11/2021 23:51
1,2,3-Trichloropropane	ND	H	0.0050	1	07/11/2021 23:51
1,2,4-Trimethylbenzene	ND	H	0.50	1	07/11/2021 23:51
1,3,5-Trimethylbenzene	ND	H	0.50	1	07/11/2021 23:51
Vinyl Chloride	ND	H	0.0050	1	07/11/2021 23:51
m,p-Xylene	ND	H	0.50	1	07/11/2021 23:51
o-Xylene	ND	H	0.50	1	07/11/2021 23:51
Xylenes, Total	ND	H	0.50	1	07/11/2021 23:51

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-GW	2106G20-016B	Water	06/25/2021 10:57	GC16 07112119.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
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Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	101	H	70-130	07/11/2021 23:51
Toluene-d8	96	H	70-130	07/11/2021 23:51
4-BFB	106	H	70-130	07/11/2021 23:51

Analyst(s): ANL

Analytical Comments: b1



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
SB-2-GW	2106G20-017B	Water	06/25/2021 11:10		GC16 07112120.D	225247
Analytes	Result	Qualifiers	RL	DF	Date Analyzed	
Acetone	ND	H	40	1	07/12/2021 00:32	
tert-Amyl methyl ether (TAME)	ND	H	0.50	1	07/12/2021 00:32	
Benzene	ND	H	0.20	1	07/12/2021 00:32	
Bromobenzene	ND	H	0.50	1	07/12/2021 00:32	
Bromochloromethane	ND	H	0.50	1	07/12/2021 00:32	
Bromodichloromethane	ND	H	0.050	1	07/12/2021 00:32	
Bromoform	ND	H	0.50	1	07/12/2021 00:32	
Bromomethane	ND	H	0.50	1	07/12/2021 00:32	
2-Butanone (MEK)	ND	H	5.0	1	07/12/2021 00:32	
t-Butyl alcohol (TBA)	ND	H	5.0	1	07/12/2021 00:32	
n-Butyl benzene	ND	H	0.50	1	07/12/2021 00:32	
sec-Butyl benzene	ND	H	0.50	1	07/12/2021 00:32	
tert-Butyl benzene	ND	H	0.50	1	07/12/2021 00:32	
Carbon Disulfide	ND	H	0.50	1	07/12/2021 00:32	
Carbon Tetrachloride	ND	H	0.050	1	07/12/2021 00:32	
Chlorobenzene	ND	H	0.50	1	07/12/2021 00:32	
Chloroethane	ND	H	0.50	1	07/12/2021 00:32	
Chloroform	ND	H	0.10	1	07/12/2021 00:32	
Chloromethane	ND	H	0.50	1	07/12/2021 00:32	
2-Chlorotoluene	ND	H	0.50	1	07/12/2021 00:32	
4-Chlorotoluene	ND	H	0.50	1	07/12/2021 00:32	
Dibromochloromethane	ND	H	0.15	1	07/12/2021 00:32	
1,2-Dibromo-3-chloropropane	ND	H	0.020	1	07/12/2021 00:32	
1,2-Dibromoethane (EDB)	ND	H	0.040	1	07/12/2021 00:32	
Dibromomethane	ND	H	0.50	1	07/12/2021 00:32	
1,2-Dichlorobenzene	ND	H	0.50	1	07/12/2021 00:32	
1,3-Dichlorobenzene	ND	H	0.50	1	07/12/2021 00:32	
1,4-Dichlorobenzene	ND	H	0.50	1	07/12/2021 00:32	
Dichlorodifluoromethane	ND	H	0.50	1	07/12/2021 00:32	
1,1-Dichloroethane	ND	H	0.50	1	07/12/2021 00:32	
1,2-Dichloroethane (1,2-DCA)	ND	H	0.020	1	07/12/2021 00:32	
1,1-Dichloroethene	ND	H	0.010	1	07/12/2021 00:32	
cis-1,2-Dichloroethene	ND	H	0.50	1	07/12/2021 00:32	
trans-1,2-Dichloroethene	ND	H	0.50	1	07/12/2021 00:32	
1,2-Dichloropropane	ND	H	0.20	1	07/12/2021 00:32	
1,3-Dichloropropane	ND	H	0.50	1	07/12/2021 00:32	
2,2-Dichloropropane	ND	H	0.50	1	07/12/2021 00:32	

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-GW	2106G20-017B	Water	06/25/2021 11:10	GC16 07112120.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	H	0.50	1	07/12/2021 00:32
cis-1,3-Dichloropropene	ND	H	0.50	1	07/12/2021 00:32
trans-1,3-Dichloropropene	ND	H	0.50	1	07/12/2021 00:32
Diisopropyl ether (DIPE)	ND	H	0.50	1	07/12/2021 00:32
Ethylbenzene	ND	H	0.50	1	07/12/2021 00:32
Ethyl tert-butyl ether (ETBE)	ND	H	0.50	1	07/12/2021 00:32
Freon 113	ND	H	0.50	1	07/12/2021 00:32
Hexachlorobutadiene	ND	H	0.50	1	07/12/2021 00:32
Hexachloroethane	ND	H	0.20	1	07/12/2021 00:32
2-Hexanone	ND	H	0.50	1	07/12/2021 00:32
Isopropylbenzene	ND	H	0.50	1	07/12/2021 00:32
4-Isopropyl toluene	ND	H	0.50	1	07/12/2021 00:32
Methyl-t-butyl ether (MTBE)	ND	H	0.50	1	07/12/2021 00:32
Methylene chloride	ND	H	2.0	1	07/12/2021 00:32
4-Methyl-2-pentanone (MIBK)	ND	H	0.50	1	07/12/2021 00:32
Naphthalene	ND	H	0.30	1	07/12/2021 00:32
n-Propyl benzene	ND	H	0.50	1	07/12/2021 00:32
Styrene	ND	H	2.0	1	07/12/2021 00:32
1,1,1,2-Tetrachloroethane	ND	H	0.50	1	07/12/2021 00:32
1,1,2,2-Tetrachloroethane	ND	H	0.020	1	07/12/2021 00:32
Tetrachloroethene	ND	H	0.20	1	07/12/2021 00:32
Toluene	ND	H	0.50	1	07/12/2021 00:32
1,2,3-Trichlorobenzene	ND	H	0.50	1	07/12/2021 00:32
1,2,4-Trichlorobenzene	ND	H	0.50	1	07/12/2021 00:32
1,1,1-Trichloroethane	ND	H	0.50	1	07/12/2021 00:32
1,1,2-Trichloroethane	ND	H	0.20	1	07/12/2021 00:32
Trichloroethene	ND	H	0.50	1	07/12/2021 00:32
Trichlorofluoromethane	ND	H	0.50	1	07/12/2021 00:32
1,2,3-Trichloropropane	ND	H	0.0050	1	07/12/2021 00:32
1,2,4-Trimethylbenzene	ND	H	0.50	1	07/12/2021 00:32
1,3,5-Trimethylbenzene	ND	H	0.50	1	07/12/2021 00:32
Vinyl Chloride	ND	H	0.0050	1	07/12/2021 00:32
m,p-Xylene	ND	H	0.50	1	07/12/2021 00:32
o-Xylene	ND	H	0.50	1	07/12/2021 00:32
Xylenes, Total	ND	H	0.50	1	07/12/2021 00:32

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-GW	2106G20-017B	Water	06/25/2021 11:10	GC16 07112120.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	103	H	70-130		07/12/2021 00:32
Toluene-d8	107	H	70-130		07/12/2021 00:32
4-BFB	103	H	70-130		07/12/2021 00:32

Analyst(s): ANL

Analytical Comments: b1



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-GW	2106G20-018B	Water	06/25/2021 11:25	GC16 07112121.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Acetone	ND	H	40	1	07/12/2021 01:13
tert-Amyl methyl ether (TAME)	ND	H	0.50	1	07/12/2021 01:13
Benzene	ND	H	0.20	1	07/12/2021 01:13
Bromobenzene	ND	H	0.50	1	07/12/2021 01:13
Bromochloromethane	ND	H	0.50	1	07/12/2021 01:13
Bromodichloromethane	ND	H	0.050	1	07/12/2021 01:13
Bromoform	ND	H	0.50	1	07/12/2021 01:13
Bromomethane	ND	H	0.50	1	07/12/2021 01:13
2-Butanone (MEK)	ND	H	5.0	1	07/12/2021 01:13
t-Butyl alcohol (TBA)	ND	H	5.0	1	07/12/2021 01:13
n-Butyl benzene	ND	H	0.50	1	07/12/2021 01:13
sec-Butyl benzene	ND	H	0.50	1	07/12/2021 01:13
tert-Butyl benzene	ND	H	0.50	1	07/12/2021 01:13
Carbon Disulfide	ND	H	0.50	1	07/12/2021 01:13
Carbon Tetrachloride	ND	H	0.050	1	07/12/2021 01:13
Chlorobenzene	ND	H	0.50	1	07/12/2021 01:13
Chloroethane	ND	H	0.50	1	07/12/2021 01:13
Chloroform	ND	H	0.10	1	07/12/2021 01:13
Chloromethane	ND	H	0.50	1	07/12/2021 01:13
2-Chlorotoluene	ND	H	0.50	1	07/12/2021 01:13
4-Chlorotoluene	ND	H	0.50	1	07/12/2021 01:13
Dibromochloromethane	ND	H	0.15	1	07/12/2021 01:13
1,2-Dibromo-3-chloropropane	ND	H	0.020	1	07/12/2021 01:13
1,2-Dibromoethane (EDB)	ND	H	0.040	1	07/12/2021 01:13
Dibromomethane	ND	H	0.50	1	07/12/2021 01:13
1,2-Dichlorobenzene	ND	H	0.50	1	07/12/2021 01:13
1,3-Dichlorobenzene	ND	H	0.50	1	07/12/2021 01:13
1,4-Dichlorobenzene	ND	H	0.50	1	07/12/2021 01:13
Dichlorodifluoromethane	ND	H	0.50	1	07/12/2021 01:13
1,1-Dichloroethane	ND	H	0.50	1	07/12/2021 01:13
1,2-Dichloroethane (1,2-DCA)	ND	H	0.020	1	07/12/2021 01:13
1,1-Dichloroethene	ND	H	0.010	1	07/12/2021 01:13
cis-1,2-Dichloroethene	ND	H	0.50	1	07/12/2021 01:13
trans-1,2-Dichloroethene	ND	H	0.50	1	07/12/2021 01:13
1,2-Dichloropropane	ND	H	0.20	1	07/12/2021 01:13
1,3-Dichloropropane	ND	H	0.50	1	07/12/2021 01:13
2,2-Dichloropropane	ND	H	0.50	1	07/12/2021 01:13

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-GW	2106G20-018B	Water	06/25/2021 11:25	GC16 07112121.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	H	0.50	1	07/12/2021 01:13
cis-1,3-Dichloropropene	ND	H	0.50	1	07/12/2021 01:13
trans-1,3-Dichloropropene	ND	H	0.50	1	07/12/2021 01:13
Diisopropyl ether (DIPE)	ND	H	0.50	1	07/12/2021 01:13
Ethylbenzene	ND	H	0.50	1	07/12/2021 01:13
Ethyl tert-butyl ether (ETBE)	ND	H	0.50	1	07/12/2021 01:13
Freon 113	ND	H	0.50	1	07/12/2021 01:13
Hexachlorobutadiene	ND	H	0.50	1	07/12/2021 01:13
Hexachloroethane	ND	H	0.20	1	07/12/2021 01:13
2-Hexanone	ND	H	0.50	1	07/12/2021 01:13
Isopropylbenzene	ND	H	0.50	1	07/12/2021 01:13
4-Isopropyl toluene	ND	H	0.50	1	07/12/2021 01:13
Methyl-t-butyl ether (MTBE)	ND	H	0.50	1	07/12/2021 01:13
Methylene chloride	ND	H	2.0	1	07/12/2021 01:13
4-Methyl-2-pentanone (MIBK)	ND	H	0.50	1	07/12/2021 01:13
Naphthalene	ND	H	0.30	1	07/12/2021 01:13
n-Propyl benzene	ND	H	0.50	1	07/12/2021 01:13
Styrene	ND	H	2.0	1	07/12/2021 01:13
1,1,1,2-Tetrachloroethane	ND	H	0.50	1	07/12/2021 01:13
1,1,2,2-Tetrachloroethane	ND	H	0.020	1	07/12/2021 01:13
Tetrachloroethene	ND	H	0.20	1	07/12/2021 01:13
Toluene	ND	H	0.50	1	07/12/2021 01:13
1,2,3-Trichlorobenzene	ND	H	0.50	1	07/12/2021 01:13
1,2,4-Trichlorobenzene	ND	H	0.50	1	07/12/2021 01:13
1,1,1-Trichloroethane	ND	H	0.50	1	07/12/2021 01:13
1,1,2-Trichloroethane	ND	H	0.20	1	07/12/2021 01:13
Trichloroethene	ND	H	0.50	1	07/12/2021 01:13
Trichlorofluoromethane	ND	H	0.50	1	07/12/2021 01:13
1,2,3-Trichloropropane	ND	H	0.0050	1	07/12/2021 01:13
1,2,4-Trimethylbenzene	ND	H	0.50	1	07/12/2021 01:13
1,3,5-Trimethylbenzene	ND	H	0.50	1	07/12/2021 01:13
Vinyl Chloride	ND	H	0.0050	1	07/12/2021 01:13
m,p-Xylene	ND	H	0.50	1	07/12/2021 01:13
o-Xylene	ND	H	0.50	1	07/12/2021 01:13
Xylenes, Total	ND	H	0.50	1	07/12/2021 01:13

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Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 07/11/2021-07/12/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-GW	2106G20-018B	Water	06/25/2021 11:25	GC16 07112121.D	225247

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
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Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	102	H	70-130	07/12/2021 01:13
Toluene-d8	107	H	70-130	07/12/2021 01:13
4-BFB	107	H	70-130	07/12/2021 01:13

Analyst(s): ANL

Analytical Comments: b1



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	GC7 06292107.D	224420

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/29/2021 13:29
MTBE	---	0.050	1	06/29/2021 13:29
Benzene	---	0.0050	1	06/29/2021 13:29
Toluene	---	0.0050	1	06/29/2021 13:29
Ethylbenzene	---	0.0050	1	06/29/2021 13:29
m,p-Xylene	---	0.010	1	06/29/2021 13:29
o-Xylene	---	0.0050	1	06/29/2021 13:29
Xylenes	---	0.0050	1	06/29/2021 13:29

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	06/29/2021 13:29

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	GC7 06292111.D	224420

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/29/2021 15:37
MTBE	---	0.050	1	06/29/2021 15:37
Benzene	---	0.0050	1	06/29/2021 15:37
Toluene	---	0.0050	1	06/29/2021 15:37
Ethylbenzene	---	0.0050	1	06/29/2021 15:37
m,p-Xylene	---	0.010	1	06/29/2021 15:37
o-Xylene	---	0.0050	1	06/29/2021 15:37
Xylenes	---	0.0050	1	06/29/2021 15:37

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	74	62-126	06/29/2021 15:37

Analyst(s): TD

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	GC7 06292108.D	224420

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/29/2021 14:01
MTBE	---	0.050	1	06/29/2021 14:01
Benzene	---	0.0050	1	06/29/2021 14:01
Toluene	---	0.0050	1	06/29/2021 14:01
Ethylbenzene	---	0.0050	1	06/29/2021 14:01
m,p-Xylene	---	0.010	1	06/29/2021 14:01
o-Xylene	---	0.0050	1	06/29/2021 14:01
Xylenes	---	0.0050	1	06/29/2021 14:01

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	81	62-126	06/29/2021 14:01

Analyst(s): TD



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-GW	2106G20-016A	Water	06/25/2021 10:57	GC3 06282128.D	224492

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/28/2021 21:32
MTBE	---	1.0	1	06/28/2021 21:32
Benzene	---	0.50	1	06/28/2021 21:32
Toluene	---	0.50	1	06/28/2021 21:32
Ethylbenzene	---	0.50	1	06/28/2021 21:32
m,p-Xylene	---	1.0	1	06/28/2021 21:32
o-Xylene	---	0.50	1	06/28/2021 21:32
Xylenes	---	0.50	1	06/28/2021 21:32

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	92	76-115	06/28/2021 21:32

Analyst(s): TD **Analytical Comments:** b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-GW	2106G20-017A	Water	06/25/2021 11:10	GC3 06282129.D	224492

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/28/2021 22:03
MTBE	---	1.0	1	06/28/2021 22:03
Benzene	---	0.50	1	06/28/2021 22:03
Toluene	---	0.50	1	06/28/2021 22:03
Ethylbenzene	---	0.50	1	06/28/2021 22:03
m,p-Xylene	---	1.0	1	06/28/2021 22:03
o-Xylene	---	0.50	1	06/28/2021 22:03
Xylenes	---	0.50	1	06/28/2021 22:03

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	91	76-115	06/28/2021 22:03

Analyst(s): TD **Analytical Comments:** b1

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-GW	2106G20-018A	Water	06/25/2021 11:25	GC3 06282132.D	224492

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/28/2021 23:36
MTBE	---	1.0	1	06/28/2021 23:36
Benzene	---	0.50	1	06/28/2021 23:36
Toluene	---	0.50	1	06/28/2021 23:36
Ethylbenzene	---	0.50	1	06/28/2021 23:36
m,p-Xylene	---	1.0	1	06/28/2021 23:36
o-Xylene	---	0.50	1	06/28/2021 23:36
Xylenes	---	0.50	1	06/28/2021 23:36

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	96	76-115	06/28/2021 23:36

Analyst(s): TD **Analytical Comments:** b1



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	ICP-MS5 151SMPL.d	224385

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.50	1	06/29/2021 12:06
Chromium	60	0.50	1	06/29/2021 12:06
Lead	7.0	0.50	1	06/29/2021 12:06
Nickel	89	0.50	1	06/29/2021 12:06
Zinc	83	5.0	1	06/29/2021 12:06

Surrogates	REC (%)	Limits
Terbium	103	70-130

Analyst(s): WV

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	ICP-MS5 164SMPL.d	224385

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.50	1	06/29/2021 12:50
Chromium	60	0.50	1	06/29/2021 12:50
Lead	7.2	0.50	1	06/29/2021 12:50
Nickel	93	0.50	1	06/29/2021 12:50
Zinc	56	5.0	1	06/29/2021 12:50

Surrogates	REC (%)	Limits
Terbium	103	70-130

Analyst(s): WV

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	ICP-MS5 165SMPL.d	224385

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.50	1	06/29/2021 12:53
Chromium	50	0.50	1	06/29/2021 12:53
Lead	6.2	0.50	1	06/29/2021 12:53
Nickel	63	0.50	1	06/29/2021 12:53
Zinc	50	5.0	1	06/29/2021 12:53

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/29/2021 12:53

Analyst(s): WV



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-10	2106G20-004A	Soil	06/25/2021 09:18	GC31B 06292133.D	224419

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2021 00:19
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2021 00:19

Surrogates	REC (%)	Limits	Date Analyzed
C9	83	70-130	06/30/2021 00:19

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-10	2106G20-009A	Soil	06/25/2021 10:21	GC31B 06292109.D	224419

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2021 16:19
TPH-Motor Oil (C18-C36)	6.3	5.0	1	06/29/2021 16:19

Surrogates	REC (%)	Limits	Date Analyzed
C9	83	70-130	06/29/2021 16:19

Analyst(s): JIS

Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-10	2106G20-014A	Soil	06/25/2021 10:33	GC39B 06302145.D	224419

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.0	1.0	1	07/01/2021 05:02
TPH-Motor Oil (C18-C36)	13	5.0	1	07/01/2021 05:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	85	70-130	07/01/2021 05:02

Analyst(s): JIS

Analytical Comments: e7,e2



Analytical Report

Client: AEI Consultants
Date Received: 06/25/2021 14:30
Date Prepared: 06/28/2021
Project: 442058; American Canyon

WorkOrder: 2106G20
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1-GW	2106G20-016A	Water	06/25/2021 10:57	GC6A 06292164.D	224422

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/30/2021 06:10
TPH-Motor Oil (C18-C36)	ND	250	1	06/30/2021 06:10

Surrogates	REC (%)	Limits	Date Analyzed
C9	95	70-130	06/30/2021 06:10

Analyst(s): JIS **Analytical Comments:** b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2-GW	2106G20-017A	Water	06/25/2021 11:10	GC6A 06292156.D	224422

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/30/2021 03:34
TPH-Motor Oil (C18-C36)	ND	250	1	06/30/2021 03:34

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	70-130	06/30/2021 03:34

Analyst(s): JIS **Analytical Comments:** b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3-GW	2106G20-018A	Water	06/25/2021 11:25	GC6A 06292160.D	224422

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/30/2021 04:52
TPH-Motor Oil (C18-C36)	440	250	1	06/30/2021 04:52

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	70-130	06/30/2021 04:52

Analyst(s): JIS **Analytical Comments:** e7,b1



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 07/02/2021 - 07/07/2021
Instrument: GC16, GC18
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224421
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.120	0.200	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.000740	0.00500	-	-	-
Benzene	ND	0.000870	0.00500	-	-	-
Bromobenzene	ND	0.000910	0.00500	-	-	-
Bromochloromethane	ND	0.000910	0.00500	-	-	-
Bromodichloromethane	ND	0.0000940	0.00500	-	-	-
Bromoform	ND	0.00390	0.00500	-	-	-
Bromomethane	ND	0.00250	0.00500	-	-	-
2-Butanone (MEK)	ND	0.0230	0.0500	-	-	-
t-Butyl alcohol (TBA)	ND	0.0230	0.0500	-	-	-
n-Butyl benzene	ND	0.00140	0.00500	-	-	-
sec-Butyl benzene	ND	0.00150	0.00500	-	-	-
tert-Butyl benzene	ND	0.00170	0.00500	-	-	-
Carbon Disulfide	ND	0.00150	0.00500	-	-	-
Carbon Tetrachloride	ND	0.000120	0.00500	-	-	-
Chlorobenzene	ND	0.000870	0.00500	-	-	-
Chloroethane	ND	0.00160	0.00500	-	-	-
Chloroform	ND	0.000190	0.00500	-	-	-
Chloromethane	ND	0.00170	0.00500	-	-	-
2-Chlorotoluene	ND	0.00130	0.00500	-	-	-
4-Chlorotoluene	ND	0.00100	0.00500	-	-	-
Dibromochloromethane	ND	0.000420	0.00500	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.000490	0.000500	-	-	-
1,2-Dibromoethane (EDB)	ND	0.000120	0.000250	-	-	-
Dibromomethane	ND	0.000950	0.00500	-	-	-
1,2-Dichlorobenzene	ND	0.00230	0.00500	-	-	-
1,3-Dichlorobenzene	ND	0.00100	0.00500	-	-	-
1,4-Dichlorobenzene	ND	0.00100	0.00500	-	-	-
Dichlorodifluoromethane	ND	0.00170	0.00500	-	-	-
1,1-Dichloroethane	ND	0.000810	0.00500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0000710	0.000100	-	-	-
1,1-Dichloroethene	ND	0.0000690	0.00500	-	-	-
cis-1,2-Dichloroethene	ND	0.000750	0.00500	-	-	-
trans-1,2-Dichloroethene	ND	0.00120	0.00500	-	-	-
1,2-Dichloropropane	ND	0.000780	0.00500	-	-	-
1,3-Dichloropropane	ND	0.00100	0.00500	-	-	-
2,2-Dichloropropane	ND	0.00120	0.00500	-	-	-
1,1-Dichloropropene	ND	0.000960	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 07/02/2021 - 07/07/2021
Instrument: GC16, GC18
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224421
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.000660	0.00500	-	-	-
trans-1,3-Dichloropropene	ND	0.000670	0.00500	-	-	-
Diisopropyl ether (DIPE)	ND	0.000780	0.00500	-	-	-
Ethylbenzene	ND	0.00110	0.00500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.000730	0.00500	-	-	-
Freon 113	ND	0.00110	0.00500	-	-	-
Hexachlorobutadiene	ND	0.00120	0.00500	-	-	-
Hexachloroethane	ND	0.000670	0.00500	-	-	-
2-Hexanone	ND	0.00430	0.00500	-	-	-
Isopropylbenzene	ND	0.00140	0.00500	-	-	-
4-Isopropyl toluene	ND	0.00130	0.00500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.00140	0.00500	-	-	-
Methylene chloride	ND	0.00580	0.0200	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00150	0.00500	-	-	-
Naphthalene	ND	0.00220	0.00500	-	-	-
n-Propyl benzene	ND	0.00160	0.00500	-	-	-
Styrene	ND	0.00120	0.00500	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.00100	0.00500	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.000280	0.00500	-	-	-
Tetrachloroethene	0.000446,J	0.000310	0.00500	-	-	-
Toluene	ND	0.00120	0.00500	-	-	-
1,2,3-Trichlorobenzene	ND	0.00170	0.00500	-	-	-
1,2,4-Trichlorobenzene	ND	0.00120	0.00500	-	-	-
1,1,1-Trichloroethane	ND	0.000840	0.00500	-	-	-
1,1,2-Trichloroethane	ND	0.000920	0.00500	-	-	-
Trichloroethene	ND	0.000810	0.00500	-	-	-
Trichlorofluoromethane	ND	0.00130	0.00500	-	-	-
1,2,3-Trichloropropane	ND	0.000150	0.000250	-	-	-
1,2,4-Trimethylbenzene	ND	0.00320	0.00500	-	-	-
1,3,5-Trimethylbenzene	ND	0.00120	0.00500	-	-	-
Vinyl Chloride	ND	0.000130	0.000250	-	-	-
m,p-Xylene	ND	0.00250	0.00500	-	-	-
o-Xylene	ND	0.00120	0.00500	-	-	-

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Quality Control Report

Client: AEI Consultants	WorkOrder: 2106G20
Date Prepared: 06/28/2021	BatchID: 224421
Date Analyzed: 07/02/2021 - 07/07/2021	Extraction Method: SW5030B
Instrument: GC16, GC18	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: 442058; American Canyon	Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.126			0.125	101	70-140
Toluene-d8	0.149			0.125	119	70-140
4-BFB	0.0132			0.0125	106	70-140
Benzene-d6	0.0988			0.1	99	70-140
Ethylbenzene-d10	0.113			0.1	113	70-140
1,2-DCB-d4	0.0931			0.1	93	70-140

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 07/02/2021 - 07/07/2021
Instrument: GC16, GC18
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224421
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.201	0.220	0.20	100	110	60-140	9.30	20
tert-Amyl methyl ether (TAME)	0.0122	0.0127	0.020	61	63	50-140	3.57	20
Benzene	0.0148	0.0137	0.020	74	69	60-140	7.28	20
Bromobenzene	0.0157	0.0160	0.020	78	80	60-140	1.97	20
Bromochloromethane	0.0132	0.0128	0.020	66	64	60-140	3.25	20
Bromodichloromethane	0.0132	0.0131	0.020	66	65	60-140	0.534	20
Bromoform	0.0101	0.0105	0.020	50	53	40-140	4.45	20
Bromomethane	0.00969	0.00817	0.020	48	41	30-140	17.0	20
2-Butanone (MEK)	0.0932	0.101	0.080	116	126	50-140	7.87	20
t-Butyl alcohol (TBA)	0.0794	0.0910	0.080	99	114	50-140	13.6	20
n-Butyl benzene	0.0217	0.0209	0.020	108	105	60-150	3.58	20
sec-Butyl benzene	0.0209	0.0202	0.020	105	101	60-150	3.68	20
tert-Butyl benzene	0.0182	0.0178	0.020	91	89	60-140	2.03	20
Carbon Disulfide	0.0121	0.00999	0.020	61	50	50-140	19.2	20
Carbon Tetrachloride	0.0167	0.0178	0.020	84	89	60-140	6.12	20
Chlorobenzene	0.0164	0.0156	0.020	82	78	60-140	4.84	20
Chloroethane	0.0186	0.0194	0.020	93	97	50-140	3.74	20
Chloroform	0.0153	0.0149	0.020	77	75	60-140	2.74	20
Chloromethane	0.0195	0.0203	0.020	98	101	20-140	3.70	20
2-Chlorotoluene	0.0185	0.0182	0.020	93	91	60-140	2.08	20
4-Chlorotoluene	0.0174	0.0171	0.020	87	85	60-140	1.91	20
Dibromochloromethane	0.0130	0.0132	0.020	65	66	50-140	1.44	20
1,2-Dibromo-3-chloropropane	0.00529	0.00579	0.010	53	58	30-140	9.04	20
1,2-Dibromoethane (EDB)	0.00686	0.00679	0.010	69	68	40-140	0.912	20
Dibromomethane	0.0138	0.0137	0.020	69	69	60-140	0.826	20
1,2-Dichlorobenzene	0.0140	0.0143	0.020	70	72	60-140	2.17	20
1,3-Dichlorobenzene	0.0167	0.0161	0.020	83	81	60-140	3.35	20
1,4-Dichlorobenzene	0.0167	0.0161	0.020	83	81	60-140	3.35	20
Dichlorodifluoromethane	0.0195	0.0194	0.020	97	97	10-140	0.451	20
1,1-Dichloroethane	0.0154	0.0143	0.020	77	71	60-140	7.30	20
1,2-Dichloroethane (1,2-DCA)	0.0139	0.0136	0.020	69	68	60-140	1.95	20
1,1-Dichloroethene	0.0218	0.0224	0.020	109	112	60-140	2.53	20
cis-1,2-Dichloroethene	0.0136	0.0128	0.020	68	64	60-140	5.92	20
trans-1,2-Dichloroethene	0.0210	0.0221	0.020	105	111	60-140	5.10	20
1,2-Dichloropropane	0.0156	0.0151	0.020	78	76	60-140	3.29	20
1,3-Dichloropropane	0.0155	0.0156	0.020	77	78	60-140	1.09	20
2,2-Dichloropropane	0.0178	0.0174	0.020	89	87	60-140	2.01	20
1,1-Dichloropropene	0.0130	0.0119	0.020	65	60	60-140	9.01	20

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Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 07/02/2021 - 07/07/2021
Instrument: GC16, GC18
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224421
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.0136	0.0136	0.020	68	68	60-140	0.491	20
trans-1,3-Dichloropropene	0.0131	0.0132	0.020	65	66	60-140	1.09	20
Diisopropyl ether (DIPE)	0.0150	0.0146	0.020	75	73	60-140	2.52	20
Ethylbenzene	0.0162	0.0155	0.020	81	78	60-140	4.44	20
Ethyl tert-butyl ether (ETBE)	0.0136	0.0137	0.020	68	69	60-140	0.962	20
Freon 113	0.0199	0.0203	0.020	100	101	50-140	1.91	20
Hexachlorobutadiene	0.0174	0.0170	0.020	87	85	60-140	2.66	20
Hexachloroethane	0.0179	0.0177	0.020	89	89	60-140	0.653	20
2-Hexanone	0.0152	0.0144	0.020	76	72	40-140	5.40	20
Isopropylbenzene	0.0190	0.0182	0.020	95	91	60-140	4.40	20
4-Isopropyl toluene	0.0201	0.0188	0.020	100	94	60-150	6.51	20
Methyl-t-butyl ether (MTBE)	0.0153	0.0159	0.020	77	80	50-140	3.77	20
Methylene chloride	0.0129	0.0124	0.020	64	62	60-140	3.94	20
4-Methyl-2-pentanone (MIBK)	0.0137	0.0149	0.020	68	75	50-140	8.43	20
Naphthalene	0.00724	0.00785	0.020	36	39	30-140	8.04	20
n-Propyl benzene	0.0186	0.0177	0.020	93	89	60-140	4.43	20
Styrene	0.0130	0.0126	0.020	65	63	60-140	3.28	20
1,1,1,2-Tetrachloroethane	0.0140	0.0138	0.020	70	69	60-140	1.46	20
1,1,2,2-Tetrachloroethane	0.0131	0.0145	0.020	65	73	40-140	10.5	20
Tetrachloroethene	0.0147	0.0136	0.020	74	68	60-140	8.29	20
Toluene	0.0154	0.0145	0.020	77	73	60-140	5.69	20
1,2,3-Trichlorobenzene	0.00947	0.0100	0.020	47	50	40-140	5.85	20
1,2,4-Trichlorobenzene	0.0115	0.0121	0.020	57	61	50-140	5.45	20
1,1,1-Trichloroethane	0.0132	0.0124	0.020	66	62	60-140	6.25	20
1,1,2-Trichloroethane	0.0149	0.0149	0.020	75	74	60-140	0.178	20
Trichloroethene	0.0152	0.0135	0.020	76	67	60-140	12.4	20
Trichlorofluoromethane	0.0187	0.0193	0.020	93	96	50-140	3.09	20
1,2,3-Trichloropropane	0.00760	0.00800	0.010	76	80	40-140	5.19	20
1,2,4-Trimethylbenzene	0.0178	0.0175	0.020	89	87	30-140	1.56	20
1,3,5-Trimethylbenzene	0.0184	0.0179	0.020	92	89	60-140	2.89	20
Vinyl Chloride	0.00942	0.00996	0.010	94	100	30-140	5.60	20
m,p-Xylene	0.0304	0.0292	0.040	76	73	60-140	3.96	20
o-Xylene	0.0155	0.0152	0.020	78	76	60-140	2.38	20

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Quality Control Report

Client: AEI Consultants	WorkOrder: 2106G20
Date Prepared: 06/28/2021	BatchID: 224421
Date Analyzed: 07/02/2021 - 07/07/2021	Extraction Method: SW5030B
Instrument: GC16, GC18	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: 442058; American Canyon	Sample ID: MB/LCS/LCSD-224421

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.119	0.122	0.12	95	98	70-140	2.96	20
Toluene-d8	0.151	0.151	0.12	121	121	70-140	0.0205	20
4-BFB	0.0122	0.0120	0.012	98	96	70-140	1.36	20
Benzene-d6	0.0728	0.0676	0.10	73	68,F3	70-140	7.43	20
Ethylbenzene-d10	0.0936	0.0879	0.10	94	88	70-140	6.33	20
1,2-DCB-d4	0.0772	0.0776	0.10	77	78	70-140	0.505	20



Quality Control Report

Client: AEI Consultants
Date Prepared: 07/11/2021
Date Analyzed: 07/11/2021
Instrument: GC16
Matrix: Water
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 225247
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	6.30	40.0	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.130	0.500	-	-	-
Benzene	ND	0.120	0.200	-	-	-
Bromobenzene	ND	0.130	0.500	-	-	-
Bromochloromethane	ND	0.110	0.500	-	-	-
Bromodichloromethane	ND	0.0250	0.0500	-	-	-
Bromoform	ND	0.310	0.500	-	-	-
Bromomethane	ND	0.180	0.500	-	-	-
2-Butanone (MEK)	ND	1.50	5.00	-	-	-
t-Butyl alcohol (TBA)	ND	2.50	5.00	-	-	-
n-Butyl benzene	ND	0.230	0.500	-	-	-
sec-Butyl benzene	ND	0.170	0.500	-	-	-
tert-Butyl benzene	ND	0.130	0.500	-	-	-
Carbon Disulfide	ND	0.180	0.500	-	-	-
Carbon Tetrachloride	ND	0.0280	0.0500	-	-	-
Chlorobenzene	ND	0.110	0.500	-	-	-
Chloroethane	ND	0.200	0.500	-	-	-
Chloroform	ND	0.0910	0.100	-	-	-
Chloromethane	ND	0.280	0.500	-	-	-
2-Chlorotoluene	ND	0.230	0.500	-	-	-
4-Chlorotoluene	ND	0.120	0.500	-	-	-
Dibromochloromethane	ND	0.0260	0.150	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.0100	0.0200	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0210	0.0400	-	-	-
Dibromomethane	ND	0.120	0.500	-	-	-
1,2-Dichlorobenzene	ND	0.160	0.500	-	-	-
1,3-Dichlorobenzene	ND	0.120	0.500	-	-	-
1,4-Dichlorobenzene	ND	0.0930	0.500	-	-	-
Dichlorodifluoromethane	ND	0.290	0.500	-	-	-
1,1-Dichloroethane	ND	0.150	0.500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0110	0.0200	-	-	-
1,1-Dichloroethene	ND	0.00940	0.0100	-	-	-
cis-1,2-Dichloroethene	ND	0.0930	0.500	-	-	-
trans-1,2-Dichloroethene	ND	0.110	0.500	-	-	-
1,2-Dichloropropane	ND	0.0190	0.200	-	-	-
1,3-Dichloropropane	ND	0.170	0.500	-	-	-
2,2-Dichloropropane	ND	0.220	0.500	-	-	-
1,1-Dichloropropene	ND	0.0850	0.500	-	-	-

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Quality Control Report

Client:	AEI Consultants	WorkOrder:	2106G20
Date Prepared:	07/11/2021	BatchID:	225247
Date Analyzed:	07/11/2021	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	442058; American Canyon	Sample ID:	MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.210	0.500	-	-	-
trans-1,3-Dichloropropene	ND	0.280	0.500	-	-	-
Diisopropyl ether (DIPE)	ND	0.120	0.500	-	-	-
Ethylbenzene	ND	0.140	0.500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.160	0.500	-	-	-
Freon 113	ND	0.130	0.500	-	-	-
Hexachlorobutadiene	ND	0.150	0.500	-	-	-
Hexachloroethane	ND	0.0590	0.200	-	-	-
2-Hexanone	ND	0.320	0.500	-	-	-
Isopropylbenzene	ND	0.160	0.500	-	-	-
4-Isopropyl toluene	ND	0.150	0.500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.160	0.500	-	-	-
Methylene chloride	ND	0.740	2.00	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.440	0.500	-	-	-
Naphthalene	ND	0.150	0.300	-	-	-
n-Propyl benzene	ND	0.120	0.500	-	-	-
Styrene	ND	0.280	2.00	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.160	0.500	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.0110	0.0200	-	-	-
Tetrachloroethene	ND	0.160	0.200	-	-	-
Toluene	ND	0.170	0.500	-	-	-
1,2,3-Trichlorobenzene	ND	0.240	0.500	-	-	-
1,2,4-Trichlorobenzene	ND	0.220	0.500	-	-	-
1,1,1-Trichloroethane	ND	0.110	0.500	-	-	-
1,1,2-Trichloroethane	ND	0.110	0.200	-	-	-
Trichloroethene	ND	0.250	0.500	-	-	-
Trichlorofluoromethane	ND	0.140	0.500	-	-	-
1,2,3-Trichloropropane	ND	0.00450	0.00500	-	-	-
1,2,4-Trimethylbenzene	ND	0.180	0.500	-	-	-
1,3,5-Trimethylbenzene	ND	0.160	0.500	-	-	-
Vinyl Chloride	ND	0.00430	0.00500	-	-	-
m,p-Xylene	ND	0.250	0.500	-	-	-
o-Xylene	ND	0.130	0.500	-	-	-

(Cont.)



Quality Control Report

Client: AEI Consultants	WorkOrder: 2106G20
Date Prepared: 07/11/2021	BatchID: 225247
Date Analyzed: 07/11/2021	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Water	Unit: µg/L
Project: 442058; American Canyon	Sample ID: MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	24.0			25	96	70-130
Toluene-d8	25.6			25	102	70-130
4-BFB	2.48			2.5	99	70-130



Quality Control Report

Client: AEI Consultants
Date Prepared: 07/11/2021
Date Analyzed: 07/11/2021
Instrument: GC16
Matrix: Water
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 225247
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	37.2	38.8	40	93	97	60-130	4.17	20
tert-Amyl methyl ether (TAME)	3.61	3.72	4	90	93	60-130	2.78	20
Benzene	4.43	4.55	4	111	114	60-130	2.70	20
Bromobenzene	4.10	4.33	4	102	108	60-130	5.56	20
Bromochloromethane	4.14	4.12	4	103	103	60-130	0.486	20
Bromodichloromethane	3.66	3.75	4	92	94	60-130	2.36	20
Bromoform	3.31	3.37	4	83	84	50-130	1.81	20
Bromomethane	4.73	4.82	4	118	121	50-130	1.96	20
2-Butanone (MEK)	15.1	15.4	16	94	96	60-130	1.93	20
t-Butyl alcohol (TBA)	12.7	13.0	16	79	81	50-130	2.20	20
n-Butyl benzene	5.16	5.39	4	129	135,F2	60-130	4.36	20
sec-Butyl benzene	4.68	4.84	4	117	121	60-130	3.36	20
tert-Butyl benzene	4.20	4.31	4	105	108	60-130	2.61	20
Carbon Disulfide	4.22	4.37	4	105	109	60-130	3.48	20
Carbon Tetrachloride	3.58	3.70	4	90	92	60-130	3.18	20
Chlorobenzene	4.41	4.47	4	110	112	60-130	1.28	20
Chloroethane	4.42	4.50	4	110	113	60-140	1.94	20
Chloroform	3.88	3.97	4	97	99	60-130	2.41	20
Chloromethane	4.82	4.85	4	120	121	50-130	0.634	20
2-Chlorotoluene	4.23	4.34	4	106	109	60-130	2.76	20
4-Chlorotoluene	4.47	4.59	4	112	115	60-130	2.65	20
Dibromochloromethane	3.51	3.56	4	88	89	50-130	1.44	20
1,2-Dibromo-3-chloropropane	1.71	1.78	2	86	89	50-130	3.94	20
1,2-Dibromoethane (EDB)	1.87	1.91	2	93	95	60-130	2.24	20
Dibromomethane	4.03	4.08	4	101	102	60-130	1.15	20
1,2-Dichlorobenzene	4.52	4.68	4	113	117	60-130	3.48	20
1,3-Dichlorobenzene	4.40	4.61	4	110	115	60-130	4.76	20
1,4-Dichlorobenzene	4.39	4.51	4	110	113	60-130	2.71	20
Dichlorodifluoromethane	2.78	2.92	4	69	73	40-140	5.05	20
1,1-Dichloroethane	4.22	4.34	4	105	108	50-130	2.88	20
1,2-Dichloroethane (1,2-DCA)	3.82	3.91	4	96	98	60-130	2.29	20
1,1-Dichloroethene	4.29	4.44	4	107	111	60-130	3.47	20
cis-1,2-Dichloroethene	4.27	4.43	4	107	111	60-130	3.72	20
trans-1,2-Dichloroethene	4.35	4.50	4	109	112	60-130	3.36	20
1,2-Dichloropropane	4.07	4.19	4	102	105	60-130	2.89	20
1,3-Dichloropropane	3.79	3.92	4	95	98	60-130	3.33	20
2,2-Dichloropropane	3.98	4.06	4	100	102	60-130	1.96	20
1,1-Dichloropropene	4.30	4.41	4	108	110	60-130	2.45	20

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 07/11/2021
Date Analyzed: 07/11/2021
Instrument: GC16
Matrix: Water
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 225247
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	3.81	3.86	4	95	96	60-130	1.15	20
trans-1,3-Dichloropropene	3.60	3.64	4	90	91	60-130	1.36	20
Diisopropyl ether (DIPE)	4.35	4.47	4	109	112	60-130	2.81	20
Ethylbenzene	4.19	4.29	4	105	107	60-130	2.35	20
Ethyl tert-butyl ether (ETBE)	3.86	3.97	4	97	99	60-130	2.89	20
Freon 113	4.20	4.36	4	105	109	60-130	3.82	20
Hexachlorobutadiene	4.35	4.50	4	109	113	60-130	3.42	20
Hexachloroethane	3.79	3.95	4	95	99	50-130	4.09	20
2-Hexanone	3.61	3.72	4	90	93	50-130	2.89	20
Isopropylbenzene	4.52	4.72	4	113	118	60-130	4.40	20
4-Isopropyl toluene	4.72	4.78	4	118	119	60-130	1.15	20
Methyl-t-butyl ether (MTBE)	3.53	3.62	4	88	91	60-130	2.52	20
Methylene chloride	4.29	4.34	4	107	109	50-130	1.27	20
4-Methyl-2-pentanone (MIBK)	3.69	3.78	4	92	95	50-130	2.48	20
Naphthalene	4.17	4.54	4	104	114	60-130	8.54	20
n-Propyl benzene	4.50	4.65	4	112	116	60-130	3.25	20
Styrene	3.70	3.81	4	92	95	60-130	3.10	20
1,1,1,2-Tetrachloroethane	3.69	3.80	4	92	95	60-130	2.80	20
1,1,2,2-Tetrachloroethane	3.97	4.16	4	99	104	60-130	4.72	20
Tetrachloroethene	4.04	4.13	4	101	103	60-130	2.00	20
Toluene	4.13	4.17	4	103	104	60-130	0.948	20
1,2,3-Trichlorobenzene	3.85	4.09	4	96	102	60-130	6.05	20
1,2,4-Trichlorobenzene	4.11	4.42	4	103	111	60-130	7.44	20
1,1,1-Trichloroethane	3.93	4.03	4	98	101	60-130	2.68	20
1,1,2-Trichloroethane	3.94	4.07	4	99	102	60-130	3.12	20
Trichloroethene	4.49	4.50	4	112	113	60-130	0.269	20
Trichlorofluoromethane	3.87	4.05	4	97	101	60-130	4.56	20
1,2,3-Trichloropropane	1.94	2.03	2	97	102	60-130	4.57	20
1,2,4-Trimethylbenzene	4.62	4.65	4	115	116	60-130	0.715	20
1,3,5-Trimethylbenzene	4.54	4.62	4	113	116	60-130	1.87	20
Vinyl Chloride	2.04	2.12	2	102	106	60-130	3.80	20
m,p-Xylene	8.18	8.29	8	102	104	60-130	1.30	20
o-Xylene	4.10	4.20	4	103	105	60-130	2.21	20

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Quality Control Report

Client: AEI Consultants	WorkOrder: 2106G20
Date Prepared: 07/11/2021	BatchID: 225247
Date Analyzed: 07/11/2021	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Water	Unit: µg/L
Project: 442058; American Canyon	Sample ID: MB/LCS/LCSD-225247

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	25.3	25.6	25	101	103	70-130	1.25	20
Toluene-d8	25.7	25.6	25	103	103	70-130	0.140	20
4-BFB	2.52	2.53	2.5	101	101	70-130	0.594	20



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 06/28/2021 - 06/29/2021
Instrument: GC7
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224420
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-224420
 2106G20-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.610	1.00	-	-	-
MTBE	ND	0.00340	0.0500	-	-	-
Benzene	ND	0.00190	0.00500	-	-	-
Toluene	ND	0.00240	0.00500	-	-	-
Ethylbenzene	ND	0.00170	0.00500	-	-	-
m,p-Xylene	ND	0.00260	0.0100	-	-	-
o-Xylene	ND	0.000910	0.00500	-	-	-
Surrogate Recovery						
2-Fluorotoluene	0.0897			0.1	90	75-134



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 06/28/2021 - 06/29/2021
Instrument: GC7
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224420
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-224420
 2106G20-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.706	0.710	0.60	118	118	82-118	0.478	20
MTBE	0.0954	0.0928	0.10	95	93	61-119	2.74	20
Benzene	0.0946	0.0932	0.10	95	93	77-128	1.48	20
Toluene	0.100	0.0986	0.10	100	99	74-132	1.58	20
Ethylbenzene	0.103	0.103	0.10	103	103	84-127	0.151	20
m,p-Xylene	0.211	0.211	0.20	105	106	80-120	0.193	20
o-Xylene	0.101	0.100	0.10	101	100	80-120	0.366	20

Surrogate Recovery

2-Fluorotoluene	0.0883	0.0886	0.10	88	89	75-134	0.354	20
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Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	1	0.530	0.632	0.60	ND	88	105	58-129	17.5	20
MTBE	1	0.0956	0.0987	0.10	ND	96	99	47-118	3.19	20
Benzene	1	0.0772	0.0796	0.10	ND	77	80	55-129	3.06	20
Toluene	1	0.0831	0.0853	0.10	ND	83	85	56-130	2.59	20
Ethylbenzene	1	0.0866	0.0874	0.10	ND	87	87	63-129	1.01	20
m,p-Xylene	1	0.181	0.182	0.20	ND	91	91	80-120	0.536	20
o-Xylene	1	0.0859	0.0861	0.10	ND	86	86	80-120	0.226	20

Surrogate Recovery

2-Fluorotoluene	1	0.0770	0.0767	0.10		77	77	62-126	0.437	20
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Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021 - 06/29/2021
Date Analyzed: 06/28/2021 - 06/29/2021
Instrument: GC3
Matrix: Water
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224492
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS/LCSD-224492

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	20.0	50.0	-	-	-
MTBE	ND	0.490	1.00	-	-	-
Benzene	ND	0.120	0.500	-	-	-
Toluene	ND	0.110	0.500	-	-	-
Ethylbenzene	ND	0.0950	0.500	-	-	-
m,p-Xylene	ND	0.140	1.00	-	-	-
o-Xylene	ND	0.0740	0.500	-	-	-

Surrogate Recovery

aaa-TFT	8.76			10	88	74-117
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	53.6	54.7	60	89	91	78-116	2.00	20
MTBE	10.2	10.1	10	102	101	72-122	0.407	20
Benzene	10.6	10.3	10	106	103	81-123	3.26	20
Toluene	10.6	10.3	10	106	103	83-129	2.88	20
Ethylbenzene	10.0	9.90	10	100	99	88-126	1.42	20
m,p-Xylene	20.9	20.6	20	105	103	80-120	1.27	20
o-Xylene	10.4	9.94	10	104	99	80-120	4.08	20

Surrogate Recovery

aaa-TFT	9.23	9.04	10	92	90	74-117	2.06	20
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Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 06/29/2021
Instrument: ICP-MS5
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224385
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-224385

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Cadmium	ND	0.0940	0.500	-	-	-
Chromium	ND	0.130	0.500	-	-	-
Lead	ND	0.140	0.500	-	-	-
Nickel	ND	0.170	0.500	-	-	-
Zinc	ND	3.00	5.00	-	-	-

Surrogate Recovery

Terbium	517			500	103	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Cadmium	49.4	48.7	50	99	97	75-125	1.30	20
Chromium	50.1	49.3	50	100	99	75-125	1.76	20
Lead	49.8	48.6	50	100	97	75-125	2.47	20
Nickel	52.8	50.8	50	106	102	75-125	3.78	20
Zinc	521	506	500	104	101	75-125	2.94	20

Surrogate Recovery

Terbium	514	500	500	103	100	70-130	2.81	20
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Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 06/28/2021 - 07/01/2021
Instrument: GC11A, GC39B
Matrix: Soil
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224419
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-224419
 2106G20-014AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.750	1.00	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.90	5.00	-	-	-
Surrogate Recovery						
C9	21.8			25	87	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	48.0	46.5	40	120	116	70-130	3.33	20
Surrogate Recovery								
C9	21.5	21.4	25	86	85	70-130	0.651	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1	36.1	35.9	40	1.012	88	87	70-130	0.444	20
Surrogate Recovery										
C9	1	21.3	21.0	25		85	84	70-130	1.52	20



Quality Control Report

Client: AEI Consultants
Date Prepared: 06/28/2021
Date Analyzed: 06/28/2021 - 06/29/2021
Instrument: GC6B
Matrix: Water
Project: 442058; American Canyon

WorkOrder: 2106G20
BatchID: 224422
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS/LCSD-224422

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	30.0	50.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	120	250	-	-	-
Surrogate Recovery						
C9	532			625	85	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1010	1030	1000	101	103	70-130	2.42	20
Surrogate Recovery								
C9	530	540	625	85	86	70-130	1.87	20

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262



CHAIN-OF-CUSTODY RECORD

WorkOrder: 2106G20

ClientCode: AELS

- WaterTrax
 WriteOn
 EDF
 EQuIS
 Dry-Weight
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Excel

Report to:
Natasha Budimirovic
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
(408) 656-1738 FAX:

Email: nbudimirovic@aeiconsultants.com
cc/3rd Party:
PO: 264394
Project: 442058; American Canyon

Bill to:
Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 5 days;

Date Received: 06/25/2021
Date Logged: 06/28/2021

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2106G20-001	SB-1-1	Soil	6/25/2021 08:22	<input checked="" type="checkbox"/>							A	A					
2106G20-002	SB-1-3	Soil	6/25/2021 08:20	<input checked="" type="checkbox"/>							A	A					
2106G20-003	SB-1-5	Soil	6/25/2021 08:18	<input checked="" type="checkbox"/>							A	A					
2106G20-004	SB-1-10	Soil	6/25/2021 09:18	<input type="checkbox"/>	A		A		A	A			A				
2106G20-005	SB-1-15	Soil	6/25/2021 09:20	<input checked="" type="checkbox"/>							A	A					
2106G20-006	SB-2-1	Soil	6/25/2021 08:39	<input checked="" type="checkbox"/>							A	A					
2106G20-007	SB-2-3	Soil	6/25/2021 08:36	<input checked="" type="checkbox"/>							A	A					
2106G20-008	SB-2-5	Soil	6/25/2021 08:35	<input checked="" type="checkbox"/>							A	A					
2106G20-009	SB-2-10	Soil	6/25/2021 10:21	<input type="checkbox"/>	A		A		A	A			A				
2106G20-010	SB-2-12	Soil	6/25/2021 10:23	<input checked="" type="checkbox"/>							A	A					
2106G20-011	SB-3-1	Soil	6/25/2021 09:07	<input checked="" type="checkbox"/>							A	A					
2106G20-012	SB-3-3	Soil	6/25/2021 09:05	<input checked="" type="checkbox"/>							A	A					
2106G20-013	SB-3-5	Soil	6/25/2021 09:02	<input checked="" type="checkbox"/>							A	A					
2106G20-014	SB-3-10	Soil	6/25/2021 10:33	<input type="checkbox"/>	A		A		A	A			A				
2106G20-015	SB-3-12	Soil	6/25/2021 10:35	<input checked="" type="checkbox"/>							A	A					

Test Legend:

1	8260B_S	2	8260B_W	3	G-MBTEX_S	4	G-MBTEX_W
5	LUFTMS_6020_TTLC_S	6	PRDisposal Fee	7	PRHOLD	8	TPH(DMO)_S
9	TPH(DMO)_W	10		11		12	

Project Manager: Jennifer Lagerbom

Prepared by: Maria Venegas

The following SamplIDs: 004A, 009A, 014A contain testgroup Multi Range_S.; The following SamplIDs: 016A, 017A, 018A contain testgroup Multi Range_W.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2106G20

ClientCode: AELS

WaterTrax WriteOn EDF

EQuIS Dry-Weight Email HardCopy ThirdParty J-flag

Detection Summary Excel

Report to:

Natasha Budimirovic
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
(408) 656-1738 FAX:

Email: nbudimirovic@aeiconsultants.com
cc/3rd Party:
PO: 264394
Project: 442058; American Canyon

Bill to:

Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 5 days;

Date Received: 06/25/2021

Date Logged: 06/28/2021

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2106G20-016	SB-1-GW	Water	6/25/2021 10:57	<input type="checkbox"/>		B		A		A			A			
2106G20-017	SB-2-GW	Water	6/25/2021 11:10	<input type="checkbox"/>		B		A		A			A			
2106G20-018	SB-3-GW	Water	6/25/2021 11:25	<input type="checkbox"/>		B		A		A			A			

Test Legend:

1	8260B_S
5	LUFTMS_6020_TTLC_S
9	TPH(DMO)_W

2	8260B_W
6	PRDisposal Fee
10	

3	G-MBTEX_S
7	PRHOLD
11	

4	G-MBTEX_W
8	TPH(DMO)_S
12	

Project Manager: Jennifer Lagerbom

Prepared by: Maria Venegas

The following SamplIDs: 004A, 009A, 014A contain testgroup Multi Range_S.; The following SamplIDs: 016A, 017A, 018A contain testgroup Multi Range_W.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS

Project: 442058; American Canyon

Work Order: 2106G20

Client Contact: Natasha Budimirovic

QC Level: LEVEL 2

Contact's Email: nbudimirovic@aeiconsultants.com

Comments

Date Logged: 6/28/2021

WaterTrax WriteOn EDF Excel EQUiS Email HardCopy ThirdParty J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut						
004A	SB-1-10	Soil	SW6020 (LUFT)	1	Acetate Liner	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 9:18	5 days	7/2/2021		<input type="checkbox"/>							
			Multi-Range TPH											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
			SW8260B (VOCs)											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
009A	SB-2-10	Soil	SW6020 (LUFT)	1	Acetate Liner	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 10:21	5 days	7/2/2021		<input type="checkbox"/>							
			Multi-Range TPH											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
			SW8260B (VOCs)											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
014A	SB-3-10	Soil	SW6020 (LUFT)	1	Acetate Liner	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 10:33	5 days	7/2/2021		<input type="checkbox"/>							
			Multi-Range TPH											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
			SW8260B (VOCs)											<input type="checkbox"/>	<input type="checkbox"/>	5 days	7/2/2021	<input type="checkbox"/>	
016A	SB-1-GW	Water	Multi-Range TPH	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 10:57	5 days	7/2/2021	10%+	<input type="checkbox"/>							
016B	SB-1-GW	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 10:57	5 days	7/2/2021	10%+	<input type="checkbox"/>							
017A	SB-2-GW	Water	Multi-Range TPH	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 11:10	5 days	7/2/2021	5%+	<input type="checkbox"/>							
017B	SB-2-GW	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 11:10	5 days	7/2/2021	5%+	<input type="checkbox"/>							
018A	SB-3-GW	Water	Multi-Range TPH	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 11:25	5 days	7/2/2021	5%+	<input type="checkbox"/>							
018B	SB-3-GW	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	6/25/2021 11:25	5 days	7/2/2021	5%+	<input type="checkbox"/>							

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



Sample Receipt Checklist

Client Name: **AEI Consultants**
 Project: **442058; American Canyon**

Date and Time Received: **6/25/2021 14:30**
 Date Logged: **6/28/2021**
 Received by: **Maria Venegas**
 Logged by: **Maria Venegas**

WorkOrder No: **2106G20** Matrix: Soil/Water
 Carrier: Patrick Johnson (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 3.7°C		NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments



AEI Consultants -San Jose
3880 S. Bascom Avenue, Suite 109
San Jose, CA 95124, California 95124
Tel: 408.728.2907
Fax: 408.559.7601
RE: American Canyon

Work Order No.: 2106264

Dear Natasha Budimirovic:

Torrent Laboratory, Inc. received 3 sample(s) on June 25, 2021 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandroock", is written over a light blue horizontal line.

Patti L Sandroock
QA Officer

July 07, 2021

Date



Date: 7/7/2021

Client: AEI Consultants -San Jose

Project: American Canyon

Work Order: 2106264

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.



Sample Result Summary

Report prepared for: Natasha Budimirovic
 AEI Consultants -San Jose

Date Received: 06/25/21

Date Reported: 07/07/21
 2106264-001

SB-1-SG

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Carbon Disulfide	ETO15	1	0.37	1.6	16
2-Propanol (Isopropyl Alcohol)	ETO15	1	1.3	12	48
Acetone	ETO15	1	0.40	12	240
Hexane	ETO15	1	0.46	1.8	11
tert-Butanol	ETO15	1	0.62	1.5	14
2-Butanone (MEK)	ETO15	1	0.39	1.5	34
Benzene	ETO15	1	0.44	1.6	16
Toluene	ETO15	1	0.75	1.9	13
4-Methyl-2-Pentanone (MIBK)	ETO15	1	0.75	2.1	54
Tetrachloroethylene	ETO15	1	1.5	3.4	11
Ethyl Benzene	ETO15	1	0.63	2.2	3.9
m,p-Xylene	ETO15	1	0.98	2.2	4.1
Styrene	ETO15	1	0.46	2.1	3.3

2106264-002

SB-2-SG

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Dichlorodifluoromethane	ETO15	1	1.6	2.5	2.7
Vinyl Chloride	ETO15	1	0.23	1.3	3.3
Carbon Disulfide	ETO15	1	0.37	1.6	18
2-Propanol (Isopropyl Alcohol)	ETO15	1	1.3	12	60
Acetone	ETO15	1	0.40	12	380
Hexane	ETO15	1	0.46	1.8	14
tert-Butanol	ETO15	1	0.62	1.5	20
Chloroform	ETO15	1	0.97	2.4	3.7
2-Butanone (MEK)	ETO15	1	0.39	1.5	140
Benzene	ETO15	1	0.44	1.6	9.0
Toluene	ETO15	1	0.75	1.9	9.2
4-Methyl-2-Pentanone (MIBK)	ETO15	1	0.75	2.1	41
Tetrachloroethylene	ETO15	1	1.5	3.4	14
2-Hexanone	ETO15	1	0.65	2.1	5.5
Ethyl Benzene	ETO15	1	0.63	2.2	2.8
m,p-Xylene	ETO15	1	0.98	2.2	3.3
Styrene	ETO15	1	0.46	2.1	2.3

2106264-003

SB-3-SG

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Acetone	ETO15	6	2.4	71	110
2-Butanone (MEK)	ETO15	6	2.3	8.9	380
4-Methyl-2-Pentanone (MIBK)	ETO15	6	4.5	12	30



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-1-SG	Lab Sample ID: 2106264-001A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 11:58	Certified Clean WO # :
Canister/Tube ID: A12255	Received PSI : 11.5
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: FG-P	Prep Batch Date/Time: 7/6/21	7:00:00PM
Prep Batch ID: 1133105	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Helium	D1946	3.40	0.0076	1.7	ND	ND		07/06/21	20:34	BA	457870

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1.00	1.6	2.5	ND	ND		07/02/21	13:37	BA	457741
1,1-Difluoroethane	ETO15	1.00	0.35	14	ND	ND		07/02/21	13:37	BA	457741
1,2-Dichlorotetrafluoroethane	ETO15	1.00	1.4	3.5	ND	ND		07/02/21	13:37	BA	457741
Chloromethane	ETO15	1.00	2.0	4.1	ND	ND		07/02/21	13:37	BA	457741
Vinyl Chloride	ETO15	1.00	0.23	1.3	ND	ND		07/02/21	13:37	BA	457741
1,3-Butadiene	ETO15	1.00	0.34	1.1	ND	ND		07/02/21	13:37	BA	457741
Bromomethane	ETO15	1.00	0.66	1.9	ND	ND		07/02/21	13:37	BA	457741
Chloroethane	ETO15	1.00	0.81	1.3	ND	ND		07/02/21	13:37	BA	457741
Trichlorofluoromethane	ETO15	1.00	0.56	2.8	ND	ND		07/02/21	13:37	BA	457741
1,1-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		07/02/21	13:37	BA	457741
Freon 113	ETO15	1.00	1.0	3.8	ND	ND		07/02/21	13:37	BA	457741
Carbon Disulfide	ETO15	1.00	0.37	1.6	16	5.14		07/02/21	13:37	BA	457741
2-Propanol (Isopropyl Alcohol)	ETO15	1.00	1.3	12	48	19.51		07/02/21	13:37	BA	457741
Methylene Chloride	ETO15	1.00	0.70	10	ND	ND		07/02/21	13:37	BA	457741
Acetone	ETO15	1.00	0.40	12	240	100.84	E	07/02/21	13:37	BA	457741
trans-1,2-Dichloroethene	ETO15	1.00	0.48	2.0	ND	ND		07/02/21	13:37	BA	457741
Hexane	ETO15	1.00	0.46	1.8	11	3.13		07/02/21	13:37	BA	457741
MTBE	ETO15	1.00	0.44	1.8	ND	ND		07/02/21	13:37	BA	457741
tert-Butanol	ETO15	1.00	0.62	1.5	14	4.62		07/02/21	13:37	BA	457741
Diisopropyl ether (DIPE)	ETO15	1.00	0.74	2.1	ND	ND		07/02/21	13:37	BA	457741
1,1-Dichloroethane	ETO15	1.00	0.54	2.0	ND	ND		07/02/21	13:37	BA	457741
ETBE	ETO15	1.00	0.33	2.1	ND	ND		07/02/21	13:37	BA	457741
cis-1,2-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		07/02/21	13:37	BA	457741
Chloroform	ETO15	1.00	0.97	2.4	ND	ND		07/02/21	13:37	BA	457741
Vinyl Acetate	ETO15	1.00	0.76	1.8	ND	ND		07/02/21	13:37	BA	457741
Carbon Tetrachloride	ETO15	1.00	1.1	3.1	ND	ND		07/02/21	13:37	BA	457741
1,1,1-Trichloroethane	ETO15	1.00	0.79	2.7	ND	ND		07/02/21	13:37	BA	457741
2-Butanone (MEK)	ETO15	1.00	0.39	1.5	34	11.53		07/02/21	13:37	BA	457741
Ethyl Acetate	ETO15	1.00	0.48	1.8	ND	ND		07/02/21	13:37	BA	457741
Tetrahydrofuran	ETO15	1.00	0.45	1.5	ND	ND		07/02/21	13:37	BA	457741



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-1-SG	Lab Sample ID: 2106264-001A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 11:58	Certified Clean WO # :
Canister/Tube ID: A12255	Received PSI : 11.5
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Benzene	ETO15	1.00	0.44	1.6	16	5.02		07/02/21	13:37	BA	457741
TAME	ETO15	1.00	0.67	2.1	ND	ND		07/02/21	13:37	BA	457741
1,2-Dichloroethane (EDC)	ETO15	1.00	0.42	2.0	ND	ND		07/02/21	13:37	BA	457741
Trichloroethylene	ETO15	1.00	0.81	2.7	ND	ND		07/02/21	13:37	BA	457741
1,2-Dichloropropane	ETO15	1.00	0.76	2.3	ND	ND		07/02/21	13:37	BA	457741
Bromodichloromethane	ETO15	1.00	0.74	3.4	ND	ND		07/02/21	13:37	BA	457741
1,4-Dioxane	ETO15	1.00	1.8	3.6	ND	ND		07/02/21	13:37	BA	457741
trans-1,3-Dichloropropene	ETO15	1.00	1.1	2.3	ND	ND		07/02/21	13:37	BA	457741
Toluene	ETO15	1.00	0.75	1.9	13	3.45		07/02/21	13:37	BA	457741
4-Methyl-2-Pentanone (MIBK)	ETO15	1.00	0.75	2.1	54	13.17		07/02/21	13:37	BA	457741
cis-1,3-Dichloropropene	ETO15	1.00	0.42	2.3	ND	ND		07/02/21	13:37	BA	457741
Tetrachloroethylene	ETO15	1.00	1.5	3.4	11	1.62		07/02/21	13:37	BA	457741
1,1,2-Trichloroethane	ETO15	1.00	0.58	2.7	ND	ND		07/02/21	13:37	BA	457741
Dibromochloromethane	ETO15	1.00	1.1	4.3	ND	ND		07/02/21	13:37	BA	457741
1,2-Dibromoethane (EDB)	ETO15	1.00	0.74	3.8	ND	ND		07/02/21	13:37	BA	457741
2-Hexanone	ETO15	1.00	0.65	2.1	ND	ND		07/02/21	13:37	BA	457741
Ethyl Benzene	ETO15	1.00	0.63	2.2	3.9	0.90		07/02/21	13:37	BA	457741
Chlorobenzene	ETO15	1.00	0.60	2.3	ND	ND		07/02/21	13:37	BA	457741
1,1,1,2-Tetrachloroethane	ETO15	1.00	0.84	3.4	ND	ND		07/02/21	13:37	BA	457741
m,p-Xylene	ETO15	1.00	0.98	2.2	4.1	0.94		07/02/21	13:37	BA	457741
o-Xylene	ETO15	1.00	0.30	2.2	ND	ND		07/02/21	13:37	BA	457741
Styrene	ETO15	1.00	0.46	2.1	3.3	0.77		07/02/21	13:37	BA	457741
Bromoform	ETO15	1.00	1.3	5.2	ND	ND		07/02/21	13:37	BA	457741
1,1,2,2-Tetrachloroethane	ETO15	1.00	0.82	3.4	ND	ND		07/02/21	13:37	BA	457741
4-Ethyl Toluene	ETO15	1.00	0.55	2.5	ND	ND		07/02/21	13:37	BA	457741
1,3,5-Trimethylbenzene	ETO15	1.00	0.30	2.5	ND	ND		07/02/21	13:37	BA	457741
1,2,4-Trimethylbenzene	ETO15	1.00	0.60	2.5	ND	ND		07/02/21	13:37	BA	457741
1,4-Dichlorobenzene	ETO15	1.00	0.75	3.0	ND	ND		07/02/21	13:37	BA	457741
1,3-Dichlorobenzene	ETO15	1.00	1.3	3.0	ND	ND		07/02/21	13:37	BA	457741
1,2-Dichlorobenzene	ETO15	1.00	1.1	3.0	ND	ND		07/02/21	13:37	BA	457741
Hexachlorobutadiene	ETO15	1.00	1.9	5.3	ND	ND		07/02/21	13:37	BA	457741
1,2,4-Trichlorobenzene	ETO15	1.00	2.2	3.7	ND	ND		07/02/21	13:37	BA	457741
Naphthalene	ETO15	1.00	1.3	2.6	ND	ND		07/02/21	13:37	BA	457741
(S) 4-Bromofluorobenzene	ETO15	1.00	50	150	110 %			07/02/21	13:37	BA	457741



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-2-SG	Lab Sample ID: 2106264-002A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 13:30	Certified Clean WO # :
Canister/Tube ID: A12254	Received PSI : 10.3
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: FG-P	Prep Batch Date/Time: 7/6/21	7:00:00PM
Prep Batch ID: 1133105	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Helium	D1946	4.00	0.0089	2.0	ND	ND		07/06/21	20:53	BA	457870

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1.00	1.6	2.5	2.7	0.55		07/02/21	14:05	BA	457741
1,1-Difluoroethane	ETO15	1.00	0.35	14	ND	ND		07/02/21	14:05	BA	457741
1,2-Dichlorotetrafluoroethane	ETO15	1.00	1.4	3.5	ND	ND		07/02/21	14:05	BA	457741
Chloromethane	ETO15	1.00	2.0	4.1	ND	ND		07/02/21	14:05	BA	457741
Vinyl Chloride	ETO15	1.00	0.23	1.3	3.3	1.29		07/02/21	14:05	BA	457741
1,3-Butadiene	ETO15	1.00	0.34	1.1	ND	ND		07/02/21	14:05	BA	457741
Bromomethane	ETO15	1.00	0.66	1.9	ND	ND		07/02/21	14:05	BA	457741
Chloroethane	ETO15	1.00	0.81	1.3	ND	ND		07/02/21	14:05	BA	457741
Trichlorofluoromethane	ETO15	1.00	0.56	2.8	ND	ND		07/02/21	14:05	BA	457741
1,1-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		07/02/21	14:05	BA	457741
Freon 113	ETO15	1.00	1.0	3.8	ND	ND		07/02/21	14:05	BA	457741
Carbon Disulfide	ETO15	1.00	0.37	1.6	18	5.79		07/02/21	14:05	BA	457741
2-Propanol (Isopropyl Alcohol)	ETO15	1.00	1.3	12	60	24.39		07/02/21	14:05	BA	457741
Methylene Chloride	ETO15	1.00	0.70	10	ND	ND		07/02/21	14:05	BA	457741
Acetone	ETO15	1.00	0.40	12	380	159.66		07/02/21	14:05	BA	457741
trans-1,2-Dichloroethene	ETO15	1.00	0.48	2.0	ND	ND		07/02/21	14:05	BA	457741
Hexane	ETO15	1.00	0.46	1.8	14	3.98		07/02/21	14:05	BA	457741
MTBE	ETO15	1.00	0.44	1.8	ND	ND		07/02/21	14:05	BA	457741
tert-Butanol	ETO15	1.00	0.62	1.5	20	6.60		07/02/21	14:05	BA	457741
Diisopropyl ether (DIPE)	ETO15	1.00	0.74	2.1	ND	ND		07/02/21	14:05	BA	457741
1,1-Dichloroethane	ETO15	1.00	0.54	2.0	ND	ND		07/02/21	14:05	BA	457741
ETBE	ETO15	1.00	0.33	2.1	ND	ND		07/02/21	14:05	BA	457741
cis-1,2-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		07/02/21	14:05	BA	457741
Chloroform	ETO15	1.00	0.97	2.4	3.7	0.76		07/02/21	14:05	BA	457741
Vinyl Acetate	ETO15	1.00	0.76	1.8	ND	ND		07/02/21	14:05	BA	457741
Carbon Tetrachloride	ETO15	1.00	1.1	3.1	ND	ND		07/02/21	14:05	BA	457741
1,1,1-Trichloroethane	ETO15	1.00	0.79	2.7	ND	ND		07/02/21	14:05	BA	457741
2-Butanone (MEK)	ETO15	1.00	0.39	1.5	140	47.46		07/02/21	14:05	BA	457741
Ethyl Acetate	ETO15	1.00	0.48	1.8	ND	ND		07/02/21	14:05	BA	457741
Tetrahydrofuran	ETO15	1.00	0.45	1.5	ND	ND		07/02/21	14:05	BA	457741



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-2-SG	Lab Sample ID: 2106264-002A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 13:30	Certified Clean WO # :
Canister/Tube ID: A12254	Received PSI : 10.3
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Benzene	ETO15	1.00	0.44	1.6	9.0	2.82		07/02/21	14:05	BA	457741
TAME	ETO15	1.00	0.67	2.1	ND	ND		07/02/21	14:05	BA	457741
1,2-Dichloroethane (EDC)	ETO15	1.00	0.42	2.0	ND	ND		07/02/21	14:05	BA	457741
Trichloroethylene	ETO15	1.00	0.81	2.7	ND	ND		07/02/21	14:05	BA	457741
1,2-Dichloropropane	ETO15	1.00	0.76	2.3	ND	ND		07/02/21	14:05	BA	457741
Bromodichloromethane	ETO15	1.00	0.74	3.4	ND	ND		07/02/21	14:05	BA	457741
1,4-Dioxane	ETO15	1.00	1.8	3.6	ND	ND		07/02/21	14:05	BA	457741
trans-1,3-Dichloropropene	ETO15	1.00	1.1	2.3	ND	ND		07/02/21	14:05	BA	457741
Toluene	ETO15	1.00	0.75	1.9	9.2	2.44		07/02/21	14:05	BA	457741
4-Methyl-2-Pentanone (MIBK)	ETO15	1.00	0.75	2.1	41	10.00		07/02/21	14:05	BA	457741
cis-1,3-Dichloropropene	ETO15	1.00	0.42	2.3	ND	ND		07/02/21	14:05	BA	457741
Tetrachloroethylene	ETO15	1.00	1.5	3.4	14	2.06		07/02/21	14:05	BA	457741
1,1,2-Trichloroethane	ETO15	1.00	0.58	2.7	ND	ND		07/02/21	14:05	BA	457741
Dibromochloromethane	ETO15	1.00	1.1	4.3	ND	ND		07/02/21	14:05	BA	457741
1,2-Dibromoethane (EDB)	ETO15	1.00	0.74	3.8	ND	ND		07/02/21	14:05	BA	457741
2-Hexanone	ETO15	1.00	0.65	2.1	5.5	1.34		07/02/21	14:05	BA	457741
Ethyl Benzene	ETO15	1.00	0.63	2.2	2.8	0.65		07/02/21	14:05	BA	457741
Chlorobenzene	ETO15	1.00	0.60	2.3	ND	ND		07/02/21	14:05	BA	457741
1,1,1,2-Tetrachloroethane	ETO15	1.00	0.84	3.4	ND	ND		07/02/21	14:05	BA	457741
m,p-Xylene	ETO15	1.00	0.98	2.2	3.3	0.76		07/02/21	14:05	BA	457741
o-Xylene	ETO15	1.00	0.30	2.2	ND	ND		07/02/21	14:05	BA	457741
Styrene	ETO15	1.00	0.46	2.1	2.3	0.54		07/02/21	14:05	BA	457741
Bromoform	ETO15	1.00	1.3	5.2	ND	ND		07/02/21	14:05	BA	457741
1,1,2,2-Tetrachloroethane	ETO15	1.00	0.82	3.4	ND	ND		07/02/21	14:05	BA	457741
4-Ethyl Toluene	ETO15	1.00	0.55	2.5	ND	ND		07/02/21	14:05	BA	457741
1,3,5-Trimethylbenzene	ETO15	1.00	0.30	2.5	ND	ND		07/02/21	14:05	BA	457741
1,2,4-Trimethylbenzene	ETO15	1.00	0.60	2.5	ND	ND		07/02/21	14:05	BA	457741
1,4-Dichlorobenzene	ETO15	1.00	0.75	3.0	ND	ND		07/02/21	14:05	BA	457741
1,3-Dichlorobenzene	ETO15	1.00	1.3	3.0	ND	ND		07/02/21	14:05	BA	457741
1,2-Dichlorobenzene	ETO15	1.00	1.1	3.0	ND	ND		07/02/21	14:05	BA	457741
Hexachlorobutadiene	ETO15	1.00	1.9	5.3	ND	ND		07/02/21	14:05	BA	457741
1,2,4-Trichlorobenzene	ETO15	1.00	2.2	3.7	ND	ND		07/02/21	14:05	BA	457741
Naphthalene	ETO15	1.00	1.3	2.6	ND	ND		07/02/21	14:05	BA	457741
(S) 4-Bromofluorobenzene	ETO15	1.00	50	150	100 %			07/02/21	14:05	BA	457741



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-3-SG	Lab Sample ID: 2106264-003A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 14:31	Certified Clean WO # :
Canister/Tube ID: R3582	Received PSI : 12.3
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: FG-P	Prep Batch Date/Time: 7/6/21	7:00:00PM
Prep Batch ID: 1133105	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Helium	D1946	2.40	0.0054	1.2	ND	ND		07/06/21	21:11	BA	457870

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	6.00	9.4	15	ND	ND		07/02/21	14:30	BA	457741
1,1-Difluoroethane	ETO15	6.00	2.1	81	ND	ND		07/02/21	14:30	BA	457741
1,2-Dichlorotetrafluoroethane	ETO15	6.00	8.4	21	ND	ND		07/02/21	14:30	BA	457741
Chloromethane	ETO15	6.00	12	25	ND	ND		07/02/21	14:30	BA	457741
Vinyl Chloride	ETO15	6.00	1.4	7.7	ND	ND		07/02/21	14:30	BA	457741
1,3-Butadiene	ETO15	6.00	2.0	6.6	ND	ND		07/02/21	14:30	BA	457741
Bromomethane	ETO15	6.00	3.9	12	ND	ND		07/02/21	14:30	BA	457741
Chloroethane	ETO15	6.00	4.9	7.9	ND	ND		07/02/21	14:30	BA	457741
Trichlorofluoromethane	ETO15	6.00	3.3	17	ND	ND		07/02/21	14:30	BA	457741
1,1-Dichloroethene	ETO15	6.00	5.0	12	ND	ND		07/02/21	14:30	BA	457741
Freon 113	ETO15	6.00	6.1	23	ND	ND		07/02/21	14:30	BA	457741
Carbon Disulfide	ETO15	6.00	2.2	9.3	ND	ND		07/02/21	14:30	BA	457741
2-Propanol (Isopropyl Alcohol)	ETO15	6.00	7.7	74	ND	ND		07/02/21	14:30	BA	457741
Methylene Chloride	ETO15	6.00	4.2	62	ND	ND		07/02/21	14:30	BA	457741
Acetone	ETO15	6.00	2.4	71	110	46.22		07/02/21	14:30	BA	457741
trans-1,2-Dichloroethene	ETO15	6.00	2.9	12	ND	ND		07/02/21	14:30	BA	457741
Hexane	ETO15	6.00	2.8	11	ND	ND		07/02/21	14:30	BA	457741
MTBE	ETO15	6.00	2.7	11	ND	ND		07/02/21	14:30	BA	457741
tert-Butanol	ETO15	6.00	3.7	9.1	ND	ND		07/02/21	14:30	BA	457741
Diisopropyl ether (DIPE)	ETO15	6.00	4.4	13	ND	ND		07/02/21	14:30	BA	457741
1,1-Dichloroethane	ETO15	6.00	3.3	12	ND	ND		07/02/21	14:30	BA	457741
ETBE	ETO15	6.00	2.0	13	ND	ND		07/02/21	14:30	BA	457741
cis-1,2-Dichloroethene	ETO15	6.00	5.0	12	ND	ND		07/02/21	14:30	BA	457741
Chloroform	ETO15	6.00	5.8	15	ND	ND		07/02/21	14:30	BA	457741
Vinyl Acetate	ETO15	6.00	4.5	11	ND	ND		07/02/21	14:30	BA	457741
Carbon Tetrachloride	ETO15	6.00	6.6	19	ND	ND		07/02/21	14:30	BA	457741
1,1,1-Trichloroethane	ETO15	6.00	4.8	16	ND	ND		07/02/21	14:30	BA	457741
2-Butanone (MEK)	ETO15	6.00	2.3	8.9	380	128.81		07/02/21	14:30	BA	457741
Ethyl Acetate	ETO15	6.00	2.9	11	ND	ND		07/02/21	14:30	BA	457741
Tetrahydrofuran	ETO15	6.00	2.7	8.9	ND	ND		07/02/21	14:30	BA	457741



SAMPLE RESULTS

Report prepared for: Natasha Budimirovic
AEI Consultants -San Jose

Date/Time Received: 06/25/21, 4:14 pm
Date Reported: 07/07/21

Client Sample ID: SB-3-SG	Lab Sample ID: 2106264-003A
Project Name/Location: American Canyon	Sample Matrix: Air
Project Number: 442058	
Date/Time Sampled: 06/25/21/ 14:31	Certified Clean WO # :
Canister/Tube ID: R3582	Received PSI : 12.3
Collection Volume (L):	Corrected PSI :
SDG:	

Prep Method: TO15-P	Prep Batch Date/Time: 7/1/21	9:00:00PM
Prep Batch ID: 1132975	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Benzene	ETO15	6.00	2.6	9.6	ND	ND		07/02/21	14:30	BA	457741
TAME	ETO15	6.00	4.0	13	ND	ND		07/02/21	14:30	BA	457741
1,2-Dichloroethane (EDC)	ETO15	6.00	2.5	12	ND	ND		07/02/21	14:30	BA	457741
Trichloroethylene	ETO15	6.00	4.8	16	ND	ND		07/02/21	14:30	BA	457741
1,2-Dichloropropane	ETO15	6.00	4.6	14	ND	ND		07/02/21	14:30	BA	457741
Bromodichloromethane	ETO15	6.00	4.5	20	ND	ND		07/02/21	14:30	BA	457741
1,4-Dioxane	ETO15	6.00	11	22	ND	ND		07/02/21	14:30	BA	457741
trans-1,3-Dichloropropene	ETO15	6.00	6.4	14	ND	ND		07/02/21	14:30	BA	457741
Toluene	ETO15	6.00	4.5	11	ND	ND		07/02/21	14:30	BA	457741
4-Methyl-2-Pentanone (MIBK)	ETO15	6.00	4.5	12	30	7.32		07/02/21	14:30	BA	457741
cis-1,3-Dichloropropene	ETO15	6.00	2.5	14	ND	ND		07/02/21	14:30	BA	457741
Tetrachloroethylene	ETO15	6.00	8.7	20	ND	ND		07/02/21	14:30	BA	457741
1,1,2-Trichloroethane	ETO15	6.00	3.5	16	ND	ND		07/02/21	14:30	BA	457741
Dibromochloromethane	ETO15	6.00	6.7	26	ND	ND		07/02/21	14:30	BA	457741
1,2-Dibromoethane (EDB)	ETO15	6.00	4.4	23	ND	ND		07/02/21	14:30	BA	457741
2-Hexanone	ETO15	6.00	3.9	12	ND	ND		07/02/21	14:30	BA	457741
Ethyl Benzene	ETO15	6.00	3.8	13	ND	ND		07/02/21	14:30	BA	457741
Chlorobenzene	ETO15	6.00	3.6	14	ND	ND		07/02/21	14:30	BA	457741
1,1,1,2-Tetrachloroethane	ETO15	6.00	5.0	21	ND	ND		07/02/21	14:30	BA	457741
m,p-Xylene	ETO15	6.00	5.9	13	ND	ND		07/02/21	14:30	BA	457741
o-Xylene	ETO15	6.00	1.8	13	ND	ND		07/02/21	14:30	BA	457741
Styrene	ETO15	6.00	2.8	13	ND	ND		07/02/21	14:30	BA	457741
Bromoform	ETO15	6.00	7.8	31	ND	ND		07/02/21	14:30	BA	457741
1,1,2,2-Tetrachloroethane	ETO15	6.00	4.9	21	ND	ND		07/02/21	14:30	BA	457741
4-Ethyl Toluene	ETO15	6.00	3.3	15	ND	ND		07/02/21	14:30	BA	457741
1,3,5-Trimethylbenzene	ETO15	6.00	1.8	15	ND	ND		07/02/21	14:30	BA	457741
1,2,4-Trimethylbenzene	ETO15	6.00	3.6	15	ND	ND		07/02/21	14:30	BA	457741
1,4-Dichlorobenzene	ETO15	6.00	4.5	18	ND	ND		07/02/21	14:30	BA	457741
1,3-Dichlorobenzene	ETO15	6.00	8.0	18	ND	ND		07/02/21	14:30	BA	457741
1,2-Dichlorobenzene	ETO15	6.00	6.4	18	ND	ND		07/02/21	14:30	BA	457741
Hexachlorobutadiene	ETO15	6.00	11	32	ND	ND		07/02/21	14:30	BA	457741
1,2,4-Trichlorobenzene	ETO15	6.00	13	22	ND	ND		07/02/21	14:30	BA	457741
Naphthalene	ETO15	6.00	7.6	16	ND	ND		07/02/21	14:30	BA	457741
(S) 4-Bromofluorobenzene	ETO15	6.00	50	150	98 %			07/02/21	14:30	BA	457741



MB Summary Report

Work Order:	2106264	Prep Method:	TO15-P	Prep Date:	07/01/21	Prep Batch:	1132975
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	7/2/2021	Analytical Batch:	457741
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.32	0.50	ND		
1,1-Difluoroethane	0.13	5.0	0.42		
1,2-Dichlorotetrafluoroethane	0.20	0.50	ND		
Chloromethane	0.99	2.0	ND		
Vinyl Chloride	0.088	0.50	ND		
1,3-Butadiene	0.15	0.50	ND		
Bromomethane	0.17	0.50	ND		
Chloroethane	0.31	0.50	ND		
Trichlorofluoromethane	0.099	0.50	ND		
1,1-Dichloroethene	0.21	0.50	ND		
Freon 113	0.13	0.50	ND		
Carbon Disulfide	0.12	0.50	ND		
2-Propanol (Isopropyl Alcohol)	0.52	5.0	3.7		
Methylene Chloride	0.20	3.0	ND		
Acetone	0.17	5.0	ND		
trans-1,2-Dichloroethene	0.12	0.50	ND		
Hexane	0.13	0.50	ND		
MTBE	0.12	0.50	ND		
tert-Butanol	0.20	0.50	ND		
Diisopropyl ether (DIPE)	0.18	0.50	ND		
1,1-Dichloroethane	0.13	0.50	ND		
ETBE	0.078	0.50	ND		
cis-1,2-Dichloroethene	0.21	0.50	ND		
Chloroform	0.20	0.50	ND		
Vinyl Acetate	0.22	0.50	ND		
Carbon Tetrachloride	0.18	0.50	ND		
1,1,1-Trichloroethane	0.15	0.50	ND		
2-Butanone (MEK)	0.13	0.50	ND		
Ethyl Acetate	0.13	0.50	0.20		
Tetrahydrofuran	0.15	0.50	ND		
Benzene	0.14	0.50	ND		
TAME	0.16	0.50	ND		
1,2-Dichloroethane (EDC)	0.10	0.50	ND		
Trichloroethylene	0.15	0.50	ND		
1,2-Dichloropropane	0.17	0.50	ND		
Bromodichloromethane	0.11	0.50	ND		
1,4-Dioxane	0.50	1.0	ND		
trans-1,3-Dichloropropene	0.23	0.50	ND		
Toluene	0.20	0.50	ND		
4-Methyl-2-Pentanone (MIBK)	0.18	0.50	ND		
cis-1,3-Dichloropropene	0.093	0.50	ND		
Tetrachloroethylene	0.22	0.50	ND		
1,1,2-Trichloroethane	0.11	0.50	ND		
Dibromochloromethane	0.13	0.50	ND		
1,2-Dibromoethane (EDB)	0.096	0.50	ND		
2-Hexanone	0.16	0.50	ND		



MB Summary Report

Work Order:	2106264	Prep Method:	TO15-P	Prep Date:	07/01/21	Prep Batch:	1132975
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	7/2/2021	Analytical Batch:	457741
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Ethyl Benzene	0.15	0.50	ND	
Chlorobenzene	0.13	0.50	ND	
1,1,1,2-Tetrachloroethane	0.12	0.50	ND	
m,p-Xylene	0.23	0.50	ND	
o-Xylene	0.070	0.50	ND	
Styrene	0.11	0.50	ND	
Bromoform	0.13	0.50	ND	
1,1,2,2-Tetrachloroethane	0.12	0.50	ND	
4-Ethyl Toluene	0.11	0.50	ND	
1,3,5-Trimethylbenzene	0.061	0.50	ND	
1,2,4-Trimethylbenzene	0.12	0.50	ND	
1,4-Dichlorobenzene	0.12	0.50	ND	
1,3-Dichlorobenzene	0.22	0.50	ND	
1,2-Dichlorobenzene	0.18	0.50	ND	
Hexachlorobutadiene	0.17	0.50	ND	
1,2,4-Trichlorobenzene	0.29	0.50	ND	
Naphthalene	0.24	0.50	ND	
Cyclohexane	0.50	0.50	ND	
Benzyl Chloride	0.20	0.50	ND	
Heptane	0.13	0.50	0.15	
(S) 4-Bromofluorobenzene			93	

Work Order:	2106264	Prep Method:	FG-P	Prep Date:	07/06/21	Prep Batch:	1133105
Matrix:	Air	Analytical Method:	D1946	Analyzed Date:	7/6/2021	Analytical Batch:	457870
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Helium	22	5000	ND	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2106264	Prep Method:	TO15-P	Prep Date:	07/01/21	Prep Batch:	1132975
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	7/2/2021	Analytical Batch:	457741
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.21	0.50	ND	8.00	107	104	3.32	65 - 135	30	
Benzene	0.14	0.50	0.42	8.00	96.4	94.9	1.57	65 - 135	30	
Trichloroethylene	0.15	0.50	ND	8.00	98.0	95.8	2.32	65 - 135	30	
Toluene	0.20	0.50	ND	8.00	93.8	91.5	2.43	65 - 135	30	
Chlorobenzene	0.13	0.50	ND	8.00	95.1	95.7	200	65 - 135	30	
(S) 4-Bromofluorobenzene				20.0	102	104		50 - 150		

Work Order:	2106264	Prep Method:	FG-P	Prep Date:	07/06/21	Prep Batch:	1133105
Matrix:	Air	Analytical Method:	D1946	Analyzed Date:	7/6/2021	Analytical Batch:	457870
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Helium	22	100	ND	5000	98.7	89.1	10.2	65 - 135	30	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.</p> <p>NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p>X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>



Sample Receipt Checklist

Client Name: AEI Consultants -San Jose

Date and Time Received: 6/25/2021 4:14:00PM

Project Name: American Canyon

Received By: Navin Ghodasara

Work Order No.: 2106264

Physically Logged By: Navin Ghodasara

Checklist Completed By: Navin Ghodasara

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>		
Container/Temp Blank temperature in compliance?		Temperature:	°C
Water-VOA vials have zero headspace?	<u>No VOA vials submitted</u>		
Water-pH acceptable upon receipt?	<u>N/A</u>		
pH Checked by: na		pH Adjusted by: na	

Comments:

Air samples received in Summa canisters at ambient temperature.



Login Summary Report

Client ID: TL6454 AEI Consultants -San Jose
Project Name: American Canyon
Project # : 442058
Report Due Date: 7/2/2021

QC Level: II
TAT Requested: 5+ day:5
Date Received: 6/25/2021
Time Received: 4:14 pm

Comments:
Work Order # : **2106264**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2106264-001A	SB-1-SG	06/25/21 11:58	Air				VOC_A_FG D1946 VOC_A_TO15	
Sample Note: TO-15, Helium (leak check)								
2106264-002A	SB-2-SG	06/25/21 13:30	Air				VOC_A_FG D1946 VOC_A_TO15	
2106264-003A	SB-3-SG	06/25/21 14:31	Air				VOC_A_FG D1946 VOC_A_TO15	

AEI Consultants - CA

Sample Delivery Group: L1430088
Samples Received: 11/11/2021
Project Number: 442058
Description: American Canyon Apartments

Report To: Jeremy Smith
2500 Camino Diablo
Walnut Creek, CA 94597

Entire Report Reviewed By:



Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	4	4 Cn
Sr: Sample Results	5	5 Sr
SB-4-SG L1430088-01	5	
SB-5-SG L1430088-02	7	
SB-6-SG L1430088-03	9	
Qc: Quality Control Summary	11	6 Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Organic Compounds (GC) by Method ASTM 1946	19	
Gl: Glossary of Terms	21	7 Gl
Al: Accreditations & Locations	22	8 Al
Sc: Sample Chain of Custody	23	9 Sc

SAMPLE SUMMARY

SB-4-SG L1430088-01 Air

Collected by: Nick Woods
 Collected date/time: 11/10/21 11:15
 Received date/time: 11/11/21 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1774460	1	11/15/21 11:59	11/15/21 11:59	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1774091	1	11/14/21 15:13	11/14/21 15:13	DBB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

SB-5-SG L1430088-02 Air

Collected by: Nick Woods
 Collected date/time: 11/10/21 11:57
 Received date/time: 11/11/21 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1774460	1	11/15/21 12:40	11/15/21 12:40	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1774887	1	11/16/21 10:06	11/16/21 10:06	CMS	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

SB-6-SG L1430088-03 Air

Collected by: Nick Woods
 Collected date/time: 11/10/21 11:35
 Received date/time: 11/11/21 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1773394	1	11/12/21 22:03	11/12/21 22:03	FKG	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1774887	1	11/16/21 10:09	11/16/21 10:09	CMS	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	9.54	22.7		1	WG1774460
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1774460
Benzene	71-43-2	78.10	0.200	0.639	0.798	2.55		1	WG1774460
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1774460
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1774460
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1774460
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1774460
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1774460
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1774460
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1774460
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1774460
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1774460
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1774460
Chloromethane	74-87-3	50.50	0.200	0.413	0.436	0.901		1	WG1774460
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1774460
Cyclohexane	110-82-7	84.20	0.200	0.689	1.60	5.51		1	WG1774460
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1774460
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1774460
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1774460
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1774460
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1774460
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1774460
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1774460
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1774460
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1774460
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1774460
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1774460
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1774460
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1774460
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1774460
Ethanol	64-17-5	46.10	1.25	2.36	24.5	46.2		1	WG1774460
Ethylbenzene	100-41-4	106	0.200	0.867	0.258	1.12		1	WG1774460
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1774460
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.33		1	WG1774460
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.344	1.70		1	WG1774460
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1774460
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1774460
Heptane	142-82-5	100	0.200	0.818	2.62	10.7		1	WG1774460
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1774460
n-Hexane	110-54-3	86.20	0.630	2.22	13.3	46.9		1	WG1774460
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1774460
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.17	4.06		1	WG1774460
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1774460
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	9.12	26.9		1	WG1774460
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1774460
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1774460
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1774460
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1774460
2-Propanol	67-63-0	60.10	1.25	3.07	2.28	5.60		1	WG1774460
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1774460
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1774460
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1774460
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.204	1.39		1	WG1774460
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1774460
Toluene	108-88-3	92.10	0.500	1.88	2.87	10.8		1	WG1774460
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1774460

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1774460
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1774460
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1774460
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1774460
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1774460
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1774460
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1774460
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1774460
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1774460
m&p-Xylene	1330-20-7	106	0.400	1.73	1.56	6.76		1	WG1774460
o-Xylene	95-47-6	106	0.200	0.867	0.377	1.63		1	WG1774460
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	3.84	10.4		1	WG1774460
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1774460

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1774091

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.35	19.8		1	WG1774460
Allyl chloride	107-05-1	76.53	0.200	0.626	0.488	1.53		1	WG1774460
Benzene	71-43-2	78.10	0.200	0.639	1.01	3.23		1	WG1774460
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1774460
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1774460
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1774460
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1774460
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1774460
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.547	1.70		1	WG1774460
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1774460
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1774460
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1774460
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1774460
Chloromethane	74-87-3	50.50	0.200	0.413	1.05	2.17		1	WG1774460
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1774460
Cyclohexane	110-82-7	84.20	0.200	0.689	1.81	6.23		1	WG1774460
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1774460
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1774460
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1774460
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1774460
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1774460
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1774460
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1774460
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1774460
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1774460
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1774460
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1774460
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1774460
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1774460
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1774460
Ethanol	64-17-5	46.10	1.25	2.36	24.1	45.4		1	WG1774460
Ethylbenzene	100-41-4	106	0.200	0.867	0.373	1.62		1	WG1774460
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.411	2.02		1	WG1774460
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.216	1.21		1	WG1774460
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.366	1.81		1	WG1774460
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1774460
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1774460
Heptane	142-82-5	100	0.200	0.818	0.469	1.92		1	WG1774460
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1774460
n-Hexane	110-54-3	86.20	0.630	2.22	0.650	2.29		1	WG1774460
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1774460
Methylene Chloride	75-09-2	84.90	0.200	0.694	2.42	8.40		1	WG1774460
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1774460
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1774460
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1774460
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1774460
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1774460
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1774460
2-Propanol	67-63-0	60.10	1.25	3.07	1.65	4.06		1	WG1774460
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1774460
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1774460
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1774460
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1774460
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1774460
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1774460
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1774460

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1774460
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1774460
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1774460
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.415	2.04		1	WG1774460
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.258	1.27		1	WG1774460
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1774460
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1774460
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1774460
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1774460
m&p-Xylene	1330-20-7	106	0.400	1.73	1.75	7.59		1	WG1774460
o-Xylene	95-47-6	106	0.200	0.867	0.681	2.95		1	WG1774460
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	37.4	101		1	WG1774460
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.8				WG1774460

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1774887

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.03	12.0		1	WG1773394
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1773394
Benzene	71-43-2	78.10	0.200	0.639	0.497	1.59		1	WG1773394
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1773394
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1773394
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1773394
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1773394
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1773394
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.767	2.39		1	WG1773394
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1773394
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1773394
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1773394
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1773394
Chloromethane	74-87-3	50.50	0.200	0.413	0.314	0.649		1	WG1773394
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1773394
Cyclohexane	110-82-7	84.20	0.200	0.689	0.568	1.96		1	WG1773394
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1773394
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1773394
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1773394
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1773394
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1773394
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1773394
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1773394
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1773394
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1773394
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1773394
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1773394
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1773394
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1773394
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1773394
Ethanol	64-17-5	46.10	1.25	2.36	5.50	10.4		1	WG1773394
Ethylbenzene	100-41-4	106	0.200	0.867	0.239	1.04		1	WG1773394
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1773394
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.347	1.95		1	WG1773394
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.480	2.37		1	WG1773394
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1773394
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1773394
Heptane	142-82-5	100	0.200	0.818	0.415	1.70		1	WG1773394
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1773394
n-Hexane	110-54-3	86.20	0.630	2.22	10.4	36.7		1	WG1773394
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1773394
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.378	1.31		1	WG1773394
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1773394
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.62	4.78		1	WG1773394
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1773394
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1773394
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1773394
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1773394
2-Propanol	67-63-0	60.10	1.25	3.07	1.56	3.83		1	WG1773394
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1773394
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1773394
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1773394
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1773394
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1773394
Toluene	108-88-3	92.10	0.500	1.88	2.42	9.12		1	WG1773394
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1773394

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1773394
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1773394
Trichloroethylene	79-01-6	131	0.200	1.07	0.238	1.28		1	WG1773394
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.201	0.987		1	WG1773394
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1773394
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.63	7.61		1	WG1773394
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1773394
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1773394
Vinyl acetate	108-05-4	86.10	0.200	0.704	1.93	6.80		1	WG1773394
m&p-Xylene	1330-20-7	106	0.400	1.73	0.898	3.89		1	WG1773394
o-Xylene	95-47-6	106	0.200	0.867	0.297	1.29		1	WG1773394
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	1.13	3.05		1	WG1773394
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1773394

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1774887

Method Blank (MB)

(MB) R3728991-3 11/12/21 09:51

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
1,1-Difluoroethane	U		0.129	1.00
1,2,4-Trichlorobenzene	U		0.148	0.630
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,2-Dichloropropane	U		0.0760	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
1,3-Butadiene	U		0.104	2.00
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,4-Dioxane	U		0.0833	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
2-Butanone (MEK)	U		0.0814	1.25
2-Chlorotoluene	U		0.0828	0.200
2-Propanol	U		0.264	1.25
4-Ethyltoluene	U		0.0783	0.200
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Dibromochloromethane	U		0.0727	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3728991-3 11/12/21 09:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
cis-1,3-Dichloropropene	U		0.0689	0.200
Cyclohexane	U		0.0753	0.200
Dichlorodifluoromethane	U		0.137	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
m&p-Xylene	U		0.135	0.400
Methyl Butyl Ketone	U		0.133	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Methylene Chloride	U		0.0979	0.200
n-Hexane	U		0.206	0.630
Naphthalene	U		0.350	0.630
o-Xylene	U		0.0828	0.200
Propene	0.112	U	0.0932	1.25
Styrene	U		0.0788	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
trans-1,2-Dichloroethene	U		0.0673	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
Trichloroethylene	U		0.0680	0.200
Trichlorofluoromethane	U		0.0819	0.200
Vinyl acetate	U		0.116	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl chloride	U		0.0949	0.200
(S) 1,4-Bromofluorobenzene	102			60.0-140

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3728991-1 11/12/21 08:33 • (LCSD) R3728991-2 11/12/21 09:13

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
1,1,1-Trichloroethane	3.75	4.19	4.12	112	110	70.0-130			1.68	25
1,1,2,2-Tetrachloroethane	3.75	4.15	4.10	111	109	70.0-130			1.21	25
1,1,2-Trichloroethane	3.75	4.10	4.03	109	107	70.0-130			1.72	25
1,1,2-Trichlorotrifluoroethane	3.75	4.22	4.10	113	109	70.0-130			2.88	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3728991-1 11/12/21 08:33 • (LCSD) R3728991-2 11/12/21 09:13

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethane	3.75	4.41	4.30	118	115	70.0-130			2.53	25
1,1-Dichloroethene	3.75	4.38	4.35	117	116	70.0-130			0.687	25
1,1-Difluoroethane	3.75	4.32	4.28	115	114	70.0-130			0.930	25
1,2,4-Trichlorobenzene	3.75	3.37	3.35	89.9	89.3	70.0-160			0.595	25
1,2,4-Trimethylbenzene	3.75	4.19	4.12	112	110	70.0-130			1.68	25
1,2-Dibromoethane	3.75	4.09	4.00	109	107	70.0-130			2.22	25
1,2-Dichlorobenzene	3.75	3.93	3.91	105	104	70.0-130			0.510	25
1,2-Dichloroethane	3.75	4.31	4.24	115	113	70.0-130			1.64	25
1,2-Dichloropropane	3.75	4.29	4.19	114	112	70.0-130			2.36	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.18	114	111	70.0-130			2.13	25
1,3,5-Trimethylbenzene	3.75	4.13	4.12	110	110	70.0-130			0.242	25
1,3-Butadiene	3.75	4.67	4.52	125	121	70.0-130			3.26	25
1,3-Dichlorobenzene	3.75	3.90	3.88	104	103	70.0-130			0.514	25
1,4-Dichlorobenzene	3.75	3.90	3.85	104	103	70.0-130			1.29	25
1,4-Dioxane	3.75	4.30	4.26	115	114	70.0-140			0.935	25
2,2,4-Trimethylpentane	3.75	4.38	4.34	117	116	70.0-130			0.917	25
2-Butanone (MEK)	3.75	4.32	4.22	115	113	70.0-130			2.34	25
2-Chlorotoluene	3.75	4.12	4.07	110	109	70.0-130			1.22	25
2-Propanol	3.75	4.47	4.37	119	117	70.0-139			2.26	25
4-Ethyltoluene	3.75	4.15	4.01	111	107	70.0-130			3.43	25
4-Methyl-2-pentanone (MIBK)	3.75	4.65	4.58	124	122	70.0-139			1.52	25
Acetone	3.75	4.31	4.20	115	112	70.0-130			2.59	25
Allyl Chloride	3.75	4.60	4.55	123	121	70.0-130			1.09	25
Benzene	3.75	4.13	4.06	110	108	70.0-130			1.71	25
Benzyl Chloride	3.75	3.83	3.85	102	103	70.0-152			0.521	25
Bromodichloromethane	3.75	4.14	4.08	110	109	70.0-130			1.46	25
Bromoform	3.75	3.94	3.86	105	103	70.0-130			2.05	25
Bromomethane	3.75	4.21	4.12	112	110	70.0-130			2.16	25
Carbon disulfide	3.75	4.32	4.24	115	113	70.0-130			1.87	25
Carbon tetrachloride	3.75	4.15	4.08	111	109	70.0-130			1.70	25
Chlorobenzene	3.75	4.04	3.98	108	106	70.0-130			1.50	25
Dibromochloromethane	3.75	3.97	3.91	106	104	70.0-130			1.52	25
Chloroethane	3.75	4.43	4.32	118	115	70.0-130			2.51	25
Chloroform	3.75	4.24	4.19	113	112	70.0-130			1.19	25
Chloromethane	3.75	4.44	4.31	118	115	70.0-130			2.97	25
cis-1,2-Dichloroethene	3.75	4.45	4.37	119	117	70.0-130			1.81	25
cis-1,3-Dichloropropene	3.75	4.12	4.07	110	109	70.0-130			1.22	25
Cyclohexane	3.75	4.28	4.17	114	111	70.0-130			2.60	25
Dichlorodifluoromethane	3.75	4.29	4.20	114	112	64.0-139			2.12	25
Ethanol	3.75	4.35	4.21	116	112	55.0-148			3.27	25

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3728991-1 11/12/21 08:33 • (LCSD) R3728991-2 11/12/21 09:13

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	3.75	4.13	4.09	110	109	70.0-130			0.973	25
Heptane	3.75	4.54	4.50	121	120	70.0-130			0.885	25
Hexachloro-1,3-butadiene	3.75	3.89	3.85	104	103	70.0-151			1.03	25
Isopropylbenzene	3.75	4.17	4.10	111	109	70.0-130			1.69	25
m&p-Xylene	7.50	8.32	8.23	111	110	70.0-130			1.09	25
Methyl Butyl Ketone	3.75	4.63	4.63	123	123	70.0-149			0.000	25
Methyl Methacrylate	3.75	4.36	4.25	116	113	70.0-130			2.56	25
MTBE	3.75	4.31	4.26	115	114	70.0-130			1.17	25
Methylene Chloride	3.75	4.44	4.34	118	116	70.0-130			2.28	25
n-Hexane	3.75	4.53	4.41	121	118	70.0-130			2.68	25
Naphthalene	3.75	3.76	3.75	100	100	70.0-159			0.266	25
o-Xylene	3.75	4.12	4.05	110	108	70.0-130			1.71	25
Propene	3.75	4.59	4.50	122	120	64.0-144			1.98	25
Styrene	3.75	4.15	4.09	111	109	70.0-130			1.46	25
Tetrachloroethylene	3.75	3.93	3.86	105	103	70.0-130			1.80	25
Tetrahydrofuran	3.75	4.51	4.45	120	119	70.0-137			1.34	25
Toluene	3.75	4.13	4.06	110	108	70.0-130			1.71	25
trans-1,2-Dichloroethene	3.75	4.40	4.36	117	116	70.0-130			0.913	25
trans-1,3-Dichloropropene	3.75	4.16	4.08	111	109	70.0-130			1.94	25
Trichloroethylene	3.75	4.15	4.05	111	108	70.0-130			2.44	25
Trichlorofluoromethane	3.75	4.28	4.21	114	112	70.0-130			1.65	25
Vinyl acetate	3.75	4.13	3.94	110	105	70.0-130			4.71	25
Vinyl Bromide	3.75	4.20	4.09	112	109	70.0-130			2.65	25
Vinyl chloride	3.75	4.45	4.31	119	115	70.0-130			3.20	25
(S) 1,4-Bromofluorobenzene				102	104	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3729946-3 11/15/21 10:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3729946-3 11/15/21 10:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.208	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	1.25
1,1-Difluoroethane	U		0.129	1.00
(S) 1,4-Bromofluorobenzene	97.9			60.0-140

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3729946-1 11/15/21 09:12 • (LCSD) R3729946-2 11/15/21 09:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.01	4.07	107	109	55.0-148			1.49	25
Propene	3.75	4.24	4.17	113	111	64.0-144			1.66	25
Dichlorodifluoromethane	3.75	3.28	3.18	87.5	84.8	64.0-139			3.10	25
1,2-Dichlorotetrafluoroethane	3.75	4.13	4.10	110	109	70.0-130			0.729	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3729946-1 11/15/21 09:12 • (LCSD) R3729946-2 11/15/21 09:54

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	4.14	4.03	110	107	70.0-130			2.69	25
Vinyl chloride	3.75	4.05	4.01	108	107	70.0-130			0.993	25
1,3-Butadiene	3.75	4.08	3.90	109	104	70.0-130			4.51	25
Bromomethane	3.75	3.92	3.91	105	104	70.0-130			0.255	25
Chloroethane	3.75	3.86	3.97	103	106	70.0-130			2.81	25
Trichlorofluoromethane	3.75	4.11	4.06	110	108	70.0-130			1.22	25
1,1,2-Trichlorotrifluoroethane	3.75	4.13	4.03	110	107	70.0-130			2.45	25
1,1-Dichloroethene	3.75	4.19	4.14	112	110	70.0-130			1.20	25
1,1-Dichloroethane	3.75	4.21	4.13	112	110	70.0-130			1.92	25
Acetone	3.75	4.27	4.28	114	114	70.0-130			0.234	25
2-Propanol	3.75	4.24	4.24	113	113	70.0-139			0.000	25
Carbon disulfide	3.75	3.93	3.92	105	105	70.0-130			0.255	25
Methylene Chloride	3.75	4.04	4.01	108	107	70.0-130			0.745	25
MTBE	3.75	4.07	4.08	109	109	70.0-130			0.245	25
trans-1,2-Dichloroethene	3.75	4.22	4.13	113	110	70.0-130			2.16	25
n-Hexane	3.75	4.20	4.15	112	111	70.0-130			1.20	25
Vinyl acetate	3.75	4.36	4.38	116	117	70.0-130			0.458	25
Methyl Ethyl Ketone	3.75	4.19	4.32	112	115	70.0-130			3.06	25
cis-1,2-Dichloroethene	3.75	4.27	4.19	114	112	70.0-130			1.89	25
Chloroform	3.75	4.09	4.07	109	109	70.0-130			0.490	25
Cyclohexane	3.75	4.10	4.01	109	107	70.0-130			2.22	25
1,1,1-Trichloroethane	3.75	4.17	4.15	111	111	70.0-130			0.481	25
Carbon tetrachloride	3.75	4.13	4.09	110	109	70.0-130			0.973	25
Benzene	3.75	4.05	4.05	108	108	70.0-130			0.000	25
1,2-Dichloroethane	3.75	4.15	4.24	111	113	70.0-130			2.15	25
Heptane	3.75	4.11	4.18	110	111	70.0-130			1.69	25
Trichloroethylene	3.75	4.11	4.02	110	107	70.0-130			2.21	25
1,2-Dichloropropane	3.75	4.01	4.10	107	109	70.0-130			2.22	25
1,4-Dioxane	3.75	4.21	4.23	112	113	70.0-140			0.474	25
Bromodichloromethane	3.75	4.08	4.08	109	109	70.0-130			0.000	25
cis-1,3-Dichloropropene	3.75	4.00	4.11	107	110	70.0-130			2.71	25
4-Methyl-2-pentanone (MIBK)	3.75	4.29	4.33	114	115	70.0-139			0.928	25
Toluene	3.75	4.07	4.05	109	108	70.0-130			0.493	25
trans-1,3-Dichloropropene	3.75	4.15	4.20	111	112	70.0-130			1.20	25
1,1,2-Trichloroethane	3.75	3.92	4.06	105	108	70.0-130			3.51	25
Tetrachloroethylene	3.75	3.94	4.00	105	107	70.0-130			1.51	25
Methyl Butyl Ketone	3.75	4.28	4.43	114	118	70.0-149			3.44	25
Dibromochloromethane	3.75	4.15	4.09	111	109	70.0-130			1.46	25
1,2-Dibromoethane	3.75	4.08	4.13	109	110	70.0-130			1.22	25
Chlorobenzene	3.75	3.99	4.06	106	108	70.0-130			1.74	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3729946-1 11/15/21 09:12 • (LCSD) R3729946-2 11/15/21 09:54

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethylbenzene	3.75	3.94	3.99	105	106	70.0-130			1.26	25
m&p-Xylene	7.50	8.14	8.12	109	108	70.0-130			0.246	25
o-Xylene	3.75	4.00	3.94	107	105	70.0-130			1.51	25
Styrene	3.75	4.00	4.05	107	108	70.0-130			1.24	25
Bromoform	3.75	3.97	3.95	106	105	70.0-130			0.505	25
1,1,2,2-Tetrachloroethane	3.75	3.92	3.94	105	105	70.0-130			0.509	25
4-Ethyltoluene	3.75	3.81	3.76	102	100	70.0-130			1.32	25
1,3,5-Trimethylbenzene	3.75	3.89	3.87	104	103	70.0-130			0.515	25
1,2,4-Trimethylbenzene	3.75	3.73	3.72	99.5	99.2	70.0-130			0.268	25
1,3-Dichlorobenzene	3.75	3.75	3.64	100	97.1	70.0-130			2.98	25
1,4-Dichlorobenzene	3.75	3.67	3.66	97.9	97.6	70.0-130			0.273	25
Benzyl Chloride	3.75	3.75	3.74	100	99.7	70.0-152			0.267	25
1,2-Dichlorobenzene	3.75	3.56	3.51	94.9	93.6	70.0-130			1.41	25
1,2,4-Trichlorobenzene	3.75	4.00	4.01	107	107	70.0-160			0.250	25
Hexachloro-1,3-butadiene	3.75	3.95	4.00	105	107	70.0-151			1.26	25
Naphthalene	3.75	4.05	4.15	108	111	70.0-159			2.44	25
Allyl Chloride	3.75	4.39	4.61	117	123	70.0-130			4.89	25
2-Chlorotoluene	3.75	3.88	3.95	103	105	70.0-130			1.79	25
Methyl Methacrylate	3.75	4.19	4.19	112	112	70.0-130			0.000	25
Tetrahydrofuran	3.75	4.21	4.35	112	116	70.0-137			3.27	25
2,2,4-Trimethylpentane	3.75	4.16	4.12	111	110	70.0-130			0.966	25
Vinyl Bromide	3.75	4.04	4.00	108	107	70.0-130			0.995	25
Isopropylbenzene	3.75	3.93	3.87	105	103	70.0-130			1.54	25
1,1-Difluoroethane	3.75	4.05	3.94	108	105	70.0-130			2.75	25
<i>(S) 1,4-Bromofluorobenzene</i>				99.4	98.5	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3729276-3 11/14/21 12:39

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Helium	U		0.0259	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3729276-1 11/14/21 12:27 • (LCSD) R3729276-2 11/14/21 12:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
	%	%	%	%	%	%			%	%
Helium	2.50	2.23	2.20	89.2	88.0	70.0-130			1.35	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3730019-3 11/16/21 09:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Helium	U		0.0259	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3730019-1 11/16/21 09:45 • (LCSD) R3730019-2 11/16/21 09:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Helium	2.50	2.41	2.43	96.4	97.2	70.0-130			0.826	25

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

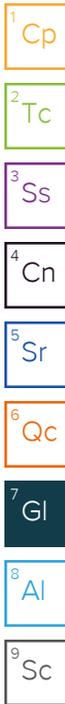
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
---	---



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

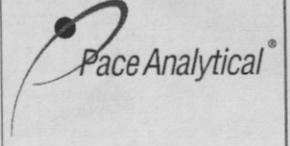
⁹ Sc

Company Name/Address:
AEI Consultants - CA
 2500 Camino Diablo
 Walnut Creek, CA 94597

Billing Information:
 Accounts Payable- Jeremy Smith
 2500 Camino Diablo
 Walnut Creek, CA 94597

Pres
 Chk

Analysis / Container / Preservative



12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report to:
Jeremy Smith

Email To:
 jasmith@aeiconsultants.com;nbudimirovic@aei

Project Description:
American Canyon Apartments

City/State Collected:
American Canyon, CA

Please Circle:
 T MT CT ET

Phone: **925-746-6000**

Client Project #
442058

Lab Project #
AEICONWCCA-442058

Collected by (print):
Nick Woods

Site/Facility ID #

P.O. #
282118

Collected by (signature):
Nick Woods

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #
 Date Results Needed

Immediately Packed on Ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Helium Summa	VOCs TO-15 Summa										
SB-4-SG	G	Air	5	11/10/21	11:15	1	X	X										
SB-5-SG	G	Air	5	11/10/21	11:57	1	X	X										
SB-6-SG	G	Air	5	11/10/21	11:35	1	X	X										
		Air																

SDG # **L1430088**
D160

Tab

Acctnum: **AEICONWCCA**

Template: **T198526**

Prelogin: **P884731**

PM: **110 - Brian Ford**

PB: *CSL 11/10/21*

Shipped Via: **FedEX Saver**

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:
 pH _____ Temp _____
 Flow _____ Other _____
 Samples returned via:
 UPS FedEx Courier
 Tracking # **936249618890**

Sample Receipt Checklist
 COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 If Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature)
Nick Woods

Date: **11/16/21**

Time: **12:30**

Received by: (Signature)

Trip Blank Received: Yes No
 HCL/MeOH
 TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **Amb** °C
 Bottles Received: **3+1 empty**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)
B. Bavaas

Date: **11-11-21** Time: **0845**

Hold: Condition: NCF / OK

Appendix J – Preliminary Stormwater Control Plan

PRELIMINARY STORMWATER CONTROL PLAN

FOR A REGULATED PROJECT

NAPA COVE APARTMENTS

CRP Affordable Housing & Community Development
4455 Morena Boulevard, Suite #107
San Diego, CA 92117

September 22, 2021

Prepared By:
Colt Alvernaz, P.E.



2633 CAMINO RAMON, SUITE 350 • SAN RAMON, CALIFORNIA 94583

(925) 866-0322 • FAX (925) 866-8575 • www.cbandg.com

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Table of Contents

I. Project Data	1
II. Setting.....	1
II.A. Project Location and Description	1
II.B. Existing Site Features and Conditions	1
II.C. Opportunities and Constraints for Stormwater Control.....	2
III. Low Impact Development Design Strategies	2
III.A. Optimization of Site Layout	2
III.A.1. Preservation of natural drainage features	2
III.A.2. Setbacks from creeks, wetlands, and riparian habitats	2
III.A.3. Minimization of imperviousness	2
III.A.4. Use of drainage as a design element	2
III.B. Use of Permeable Pavements.....	2
III.C. Dispersal of Runoff to Pervious Areas.....	2
III.D. Stormwater Control Measures	3
IV. Documentation of Drainage Design	3
IV.A. Descriptions of Each Drainage Management Area.....	3
IV.A.1. Table 2. Drainage Management Areas	3
IV.A.2. Drainage Management Area Descriptions	6
IV.B. Tabulation and Sizing Calculations.....	9
For sizing of bioretention, see figure 5.	9
V. Source Control Measures.....	9
V.A. Site activities and potential sources of pollutants	9
V.B. Table 3. Source Control Table.....	10
VI. Stormwater Facility Maintenance	11
VI.A. Ownership and Responsibility for Maintenance in Perpetuity	11
VI.B. Summary of Maintenance Requirements for Each Stormwater Facility.....	11
VII. Construction Checklist	11
VIII. Certifications	13

Tables

Table 1. Project Data Form

Table 2. Drainage Management Areas

Table 3. Source Control Measures

Table 4. Construction Plan C.3 Checklist

Table 5. Provision E.12 Sizing Calculator

Figures

Figure 1. Vicinity Map

Figure 2. Aerial Map

Figure 3. Existing Conditions

Figure 4. Proposed Conditions

Figure 5. Stormwater Control Plan

Appendices

This Stormwater Control Plan was prepared using the template dated July 11, 2014.

I. Project Data

Table 1. Project Data Form

Project Name/Number	Napa Cove Apartments
Application Submittal Date	September 2021
Project Location	APN: 058-362-005, 058-362-016 & 058-362-021
Project Phase No.	N/A
Project Type and Description	66 multi-family apartment dwelling units for rental purposes
Total Project Site Area (acres)	3.48 AC ±
Total New and Replaced Impervious Surface Area	1.99 AC ±
Total Pre-Project Impervious Surface Area	0.04 AC
Total Post-Project Impervious Surface Area	1.99 AC ±

II. Setting

II.A. Project Location and Description

The 3.48-acre Napa Cove Apartment project site is located in the City of American Canyon. The project site is located north of Melvin Park & the Kingdom Hall of Jehovah's Witnesses, west of Napa Vallejo Hwy 29, south of two parcels (one developed and one undeveloped), and east of Melvin Road. See attached Figure 1 and Figure 2 for Vicinity Map and Aerial Map respectively. The project proposes to construct 66 multi-family units in 3 apartment buildings, concrete sidewalks, and paved areas encompassing 2.0 acres (57%) more or less. The remaining 1.5 acres (43%) will be covered by landscape. Additional improvements to the site include trash enclosures, storage areas, and residential parking. The project involves a simultaneous one horizontal and vertical phase.

II.B. Existing Site Features and Conditions

The existing site currently lies on three undeveloped parcels consisting of primarily pervious surface. The site is relatively flat with surface elevations varying from 60.5 feet in the northwest side to 65 feet in the southeast corner. Existing site runoff that does not infiltrate into the groundwater or pond on site is carried through the site and transported north on Melvin Road to an existing downstream storm drain systems. According to the NRCS Web Soil Survey, the hydraulic soil is classified as group C and primarily composed of clear lake clay. See figure 3 for existing conditions.

II.C. Opportunities and Constraints for Stormwater Control

Stormwater opportunities include:

- *Bioretention area:* There are multiple bioretention areas on site for stormwater treatment.
- *Adequate soil permeability.* The existing site lies on clayey soil providing adequate infiltration from existing pervious ground surfaces.

Stormwater constraints include:

- *Lack of existing storm drain systems:* A section of detention pipe and accompanying low flow storm drain pump is to be installed onsite to regulate the amount of runoff from the increase in impervious surface created during construction.

III. Low Impact Development Design Strategies

The site layout implements multiple design strategies to mitigate stormwater control and more effectively treat onsite runoff.

III.A. Optimization of Site Layout

III.A.1. *Preservation of natural drainage features*

The site layout maintains existing drainage patterns towards the west side of the project site and offsite to Melvin Road where the runoff is carried north along the roadway to existing storm drain structures. Overland release will be accounted for in the design, maintaining and improving existing flow pattern which treats the existing Napa Cove site.

III.A.2. *Setbacks from creeks, wetlands, and riparian habitats*

There are not wetlands, creeks, or riparian habitats on or close to the site.

III.A.3. *Minimization of imperviousness*

Impervious surfaces have been limited through the layout of the site. This is done by the clustering of development areas to reduce the overall settled area footprint. Landscaping elements will be used to reduce/minimize impervious surfaces.

III.A.4. *Use of drainage as a design element*

Multiple bioretention areas are used to treat the development runoff.

III.B. Use of Permeable Pavements

Conventional concrete and conventional asphalt are to be used on the project site.

III.C. Dispersal of Runoff to Pervious Areas

Roof runoff will be captured and conveyed through roof gutters and into downspouts where it is connect to perimeter common area drainage. Runoff from pavement and/or other landscape features will also be directed to common area drainage. Common area drainage will connect to the proposed storm drain system. The storm drain system will direct all drainage and street runoff to the bioretention area.

III.D. Stormwater Control Measures

On-site runoff will be routed to a bioretention area. The bioretention area has been sized accordingly to treat site runoff.

IV. Documentation of Drainage Design

The bioretention design will be in compliance with the City of American Canyon Standard Specifications. The bioretention will consist of 12 inches of permeable rock at the bottom with perforated or slotted sloped underdrain. Above the permeable rock, 18 inches of bio-treatment soil mix. 2 inches of compost mulch will sit above the treatment soil mix. A minimum depth of 6 inches for ponding will be implemented from the top of soil, this being the grate elevation for the overflow structure. A minimum of 2 inches will be accounted for freeboard.

- See Figure 5 for bioretention detail.

IV.A. Descriptions of Each Drainage Management Area

IV.A.1. Table 2. Drainage Management Areas

DMA Name	Surface Type	Area (square feet)
DMA 1	Impervious Asphalt/Concrete,	21,371 SF±
	Pervious Landscape	6,454 SF±
DMA 2	Impervious Roof,	1,876 SF±
	Impervious Asphalt/Concrete,	1,015 SF±
	Pervious Landscape	4,940 SF±
DMA 3	Impervious Roof,	1,495 SF±
	Impervious Asphalt/Concrete,	308 SF±
	Pervious Landscape	397 SF±
DMA 4	Impervious Roof,	1,113 SF±
	Impervious Asphalt/Concrete,	3,262 SF±
	Pervious Landscape	540 SF±

DMA 5	Impervious Roof,	2,879 SF±
	Impervious Asphalt/Concrete,	7,655 SF±
	Pervious Landscape	3,714 SF±
DMA 6	Impervious Roof,	1,539 SF±
	Pervious Landscape	658 SF±
DMA 7	Impervious Roof,	1,529 SF±
	Impervious Asphalt/Concrete,	1,726 SF±
	Pervious Landscape	642 SF±
DMA 8	Impervious Roof,	1,630 SF±
	Impervious Asphalt/Concrete,	1,735 SF±
	Pervious Landscape	2,851 SF±
DMA 9	Impervious Asphalt/Concrete,	4,318 SF±
	Pervious Landscape	446 SF±
DMA 10	Impervious Roof,	3,662 SF
	Impervious Asphalt/Concrete,	464 SF±
	Pervious Landscape	2,665 SF±
DMA 11	Impervious Roof,	3,176 SF±
	Impervious Asphalt/Concrete,	1,337 SF±
	Pervious Landscape	3,207 SF±
DMA 12	Impervious Roof,	1,506 SF±
	Impervious Asphalt/Concrete,	427 SF±
	Pervious Landscape	2,223 SF±

DMA 13	Impervious Roof,	744 SF±
	Impervious Asphalt/Concrete,	305 SF±
	Pervious Landscape	1,286 SF±
DMA 14	Impervious Asphalt/Concrete,	4,885 SF±
	Pervious Landscape	603 SF±
DMA 15	Impervious Roof,	1,359 SF
	Impervious Asphalt/Concrete,	1,807 SF±
	Pervious Landscape	1,189 SF±
DMA 16	Impervious Roof,	1,368 SF±
	Pervious Landscape	1,130 SF±
DMA 17	Impervious Roof,	1,143 SF±
	Impervious Asphalt/Concrete,	87 SF±
	Pervious Landscape	1,291 SF±
DMA 18	Impervious Roof,	2,895 SF±
	Impervious Asphalt/Concrete,	87 SF±
	Pervious Landscape	2,227 SF±
DMA 19	Impervious Roof,	6,100 SF±
	Impervious Asphalt/Concrete,	2,005 SF±
	Pervious Landscape	6,841 SF±
DMA 20	Impervious Roof,	1,132 SF±
	Impervious Asphalt/Concrete,	23 SF±
	Pervious Landscape	974 SF±
DMA 21	Pervious Landscape	21,244 SF±

IV.A.2. Drainage Management Area Descriptions

DMA 1, totaling 27,825 square feet asphalt/concrete and landscape surfaces. DMA 1 drains to the bioretention 1. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 1 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 1 and bioretention location, see Figure 5.

DMA 2, totaling 7,831 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 2 drains to the bioretention 2. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 2 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 2 and bioretention location, see Figure 5.

DMA 3, totaling 2,200 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 3 drains to the bioretention 3. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 3 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 3 and bioretention location, see Figure 5.

DMA 4, totaling 4,914 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 4 drains to the bioretention 4. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 4 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 4 and bioretention location, see Figure 5.

DMA 5, totaling 14,249 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 5 drains to the bioretention 5. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 5 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 5 and bioretention location, see Figure 5.

DMA 6, totaling 2,197 square feet, drains roof and landscape surfaces. DMA 6 drains to the bioretention 6. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from landscape will drain into perimeter area drain systems

discharging into the street gutter. All active flows drain into bioretention 6 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 6 and bioretention location, see Figure 5.

DMA 7, totaling 3,897 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 7 drains to the bioretention 7. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 7 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 7 and bioretention location, see Figure 5.

DMA 8, totaling 6,216 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 8 drains to the bioretention 8. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 8 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 8 and bioretention location, see Figure 5.

DMA 9, totaling 4,764 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 9 drains to the bioretention 9. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 9 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 9 and bioretention location, see Figure 5.

DMA 10, totaling 6,791 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 10 drains to the bioretention 10. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 10 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 10 and bioretention location, see Figure 5.

DMA 11, totaling 7,721 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 11 drains to the bioretention 11. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 11 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 11 and bioretention location, see Figure 5.

DMA 12, totaling 4,157 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 12 drains to the bioretention 12. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain

systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 12 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 12 and bioretention location, see Figure 5.

DMA 13, totaling 2,335 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 13 drains to the bioretention 13. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 13 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 13 and bioretention location, see Figure 5.

DMA 14, totaling 5,544 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 14 drains to the bioretention 14. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 14 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 14 and bioretention location, see Figure 5.

DMA 15, totaling 4,432 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 15 drains to the bioretention 15. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 15 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 15 and bioretention location, see Figure 5.

DMA 16, totaling 2,498 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 16 drains to the bioretention 16. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 16 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 16 and bioretention location, see Figure 5.

DMA 17, totaling 2,521 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 17 drains to the bioretention 17. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 17 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 17 and bioretention location, see Figure 5.

DMA 18, totaling 5,209 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 18 drains to the bioretention 18. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 18 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 18 and bioretention location, see Figure 5.

DMA 19, totaling 14,946 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 19 drains to the bioretention 19. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 19 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 19 and bioretention location, see Figure 5.

DMA 20, totaling 2,120 square feet, drains roof, asphalt/concrete, and landscape surfaces. DMA 20 drains to the bioretention 20. Roof runoff will be captured and conveyed through roof gutters and connect to downspouts. Drains from downspouts will flow via sheet flow into perimeter area drain systems discharging into street gutter. Runoff from pavement will flow via sheet flow into the street gutter. Runoff from landscape will drain into perimeter area drain systems discharging into the street gutter. All active flows drain into bioretention 20 and ultimately discharge into the city of American Canyon storm drain system.

* For DMA 20 and bioretention location, see Figure 5.

DMA 21, totaling 21,244 square feet, drains only landscape surfaces. DMA 21 is a self-treating area and contains 100% of landscape. This area will only collect rains that falls on itself and does not receive stormwater from other area.

* For DMA 21 and bioretention location, see Figure 5.

IV.B. Tabulation and Sizing Calculations

For sizing of bioretention, see figure 5.

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

- Grading
- Driveways and Parking Lots
- Trash Management
- Landscaping
- Home improvements

V.B. Table 3. Source Control Table

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
On-site dumping into storm drain system	All storm drain inlets will be marked with the words “No Dumping Drains to River”.	Residents will be provided with pollution prevention information. These markings will be repainted/replaced when needed. Storm drain inlets and pipes that connect to IMPs will be maintained per the Projects Operations and Maintenance Plan.
Indoor Pest Control		Residents will be provided with Integrated Pest Management information.
Landscape	The landscape will minimize the use of fertilizers, herbicides, and pesticides. It will decrease runoff and promote infiltration. The landscape will use plants that are suitable for the site’s soil and weather conditions, as well as choosing pest-resistant plants along hardscape where possible.	
Vehicle Washing		Residents will be provided with pollution prevention information.
Roofing, Gutters & Trim	The buildings roofing, gutters, and trimmings will not use copper or other unprotected metals to prevent leach into the stormwater.	
Driveways and Sidewalks		Residents will be reminded to keep their driveways clear to prevent the buildup of litter and debris. Any debris produced due to pressure washing will be prevented from entering the storm drain system.
Fire Sprinkler Test	A means to drain water from a fire sprinkler test will be provided to the sanitary sewer system.	
Refuse Area	All dumpsters will be marked with a “Do not Dump Hazardous Materials Here” or similar.	Adequate litter receptacles will be provided throughout the site. Grounds keeping crew or contractor

		will inspect and clean up daily. Spills will be cleaned by dry methods.
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VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

All stormwater management facilities in this stormwater control plan will be the responsibility of the Owner (Oat Hill Properties II, LLC) to manage and maintain. Upon completion, the management of stormwater facilities will transfer to the future homeowners' association (HOA). It will be the duty of Oat Hill Properties II, LLC to provide a comprehensive Stormwater Control Operations and Maintenance Plan (O&M Plan) to the HOA. The applicant accepts responsibility for interim operation and maintenance of storm water treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

As stated, the O&M Plan will provide a full listing of operations and maintenance requirements. A regular inspection of the vegetation may necessitate pruning, replanting, or control over undesired invasive species. Clean up of debris blocking inlets shall be cleared prior to rain season. Weeds shall be controlled by non-selective natural herbicides. Owner shall inspect quarterly. All scheduled maintenance should be completed annually.

VII. Construction Checklist

Table 4. Construction Plan C.3 Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	See Plan Sheet #s
Figure 5	DMA 1 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 2 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 3 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 4 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 5 drains to the bioretention; Facility is designed as specified	N/A

Figure 5	DMA 6 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 7 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 8 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 9 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 10 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 11 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 12 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 13 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 14 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 15 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 16 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 17 drains to the bioretention; Facility is designed as specified	N/A
Figure 5	DMA 18 is a self-treating area and does not require treatment facility	N/A
Figure 5	DMA 19 is a self-treating area and does not require treatment facility	N/A
Figure 5	DMA 20 is a self-treating area and does not require treatment facility	N/A

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA *Post-Construction Manual*.

Colt Alvernaz, P.E.

RCE # 75740

Table 5: Provision E.12 Sizing Calculator

See the instructions and the BASMAA Post-Construction Manual

Step 1: Enter Total Site Area	Step 2: List names of all DMAs and square footage of each	Step 3: If DMA is "Self-Treating" or "Self-Retaining," copy square footage to appropriate column	Step 4: If the DMA is "Drains to Self Retaining" or "Drains to Bioretention" enter	Step 6: For "Drains to Self-Retaining" DMAs, enter the name of receiving DMA	Step 5: Slide (move) number from this column to correct column (F or H-Q)	Version 0.2. 2015-01-30.																					
Total Site Area:	153,620					BIORETENTION FACILITIES																					
DMA Names	Square Feet	Self-Treating	Self-Retaining	Runoff Factor	Drains to Self-Retaining	Name of Receiving DMA	Bio 1	Bio 2	Bio 3	Bio 4	Bio 5	Bio 6	Bio 7	Bio 8	Bio 9	Bio 11	Bio 11	Bio 12	Bio 13	Bio14	Bio15	Bio16	Bio17	Bio18	Bio19	Bio20	
DMA 1 (IMPERVIOUS)	21,371			1			21,371																				
DMA 1 (PERVIOUS)	6,454			0.1			645																				
DMA 2 (IMPERVIOUS)	2,891			1				2,891																			
DMA 2 (PERVIOUS)	4,940			0.1				494																			
DMA 3 (IMPERVIOUS)	1,803			1					1,803																		
DMA 3 (PERVIOUS)	397			0.1					40																		
DMA 4 (IMPERVIOUS)	4,374			1					4,374																		
DMA 4 (PERVIOUS)	540			0.1					54																		
DMA 5 (IMPERVIOUS)	10,535			1						10,535																	
DMA 5 (PERVIOUS)	3,714			0.1						371																	
DMA 6 (IMPERVIOUS)	1,539			1								1,539															
DMA 6 (PERVIOUS)	658			0.1								66															
DMA 7 (IMPERVIOUS)	3,255			1									3,255														
DMA 7 (PERVIOUS)	642			0.1									64														
DMA 8 (IMPERVIOUS)	3,365			1										3,365													
DMA 8 (PERVIOUS)	2,851			0.1										285													
DMA 9 (IMPERVIOUS)	4,318			1											4,318												
DMA 9 (PERVIOUS)	446			0.1											45												
DMA 10 (IMPERVIOUS)	4,126			1												4,126											
DMA 10 (PERVIOUS)	2,665			0.1												267											

Table 5: Provision E.12 Sizing Calculator

See the instructions and the BASMAA Post-Construction Manual

Step 1: Enter Total Site Area	Step 2: List names of all DMAs and square footage of each	Step 3: If DMA is "Self-Treating" or "Self-Retaining," copy square footage to appropriate column	Step 4: If the DMA is "Drains to Self Retaining" or "Drains to Bioretention" enter	Step 6: For "Drains to Self-Retaining" DMAs, enter the name of receiving DMA	Step 5: Slide (move) number from this column to correct column (F or H-Q)	BIORETENTION FACILITIES																					
Total Site Area:	153,620					Version 0.2. 2015-01-30.																					
DMA Names	Square Feet	Self-Treating	Self-Retaining	Runoff Factor	Drains to Self-Retaining	Name of Receiving DMA	Bio 1	Bio 2	Bio 3	Bio 4	Bio 5	Bio 6	Bio 7	Bio 8	Bio 9	Bio 10	Bio 11	Bio 12	Bio 13	Bio 14	Bio 15	Bio 16	Bio 17	Bio 18	Bio 19	Bio 20	
DMA 11 (IMPERVIOUS)	4,514			1														4,514									
DMA 11 (PERVIOUS)	3,207			0.1														321									
DMA 12 (IMPERVIOUS)	1,934			1															1,934								
DMA 12 (PERVIOUS)	2,223			0.1															222								
DMA 13 (IMPERVIOUS)	1,049			1																1,049							
DMA 13 (PERVIOUS)	1,286			0.1																129							
DMA 14 (IMPERVIOUS)	4,941			1																	4,941						
DMA 14 (PERVIOUS)	603			0.1																	60						
DMA 15 (IMPERVIOUS)	3,243			1																		3,243					
DMA 15 (PERVIOUS)	1,189			0.1																		119					
DMA 16 (IMPERVIOUS)	1,368			1																			1,368				
DMA 16 (PERVIOUS)	1,130			0.1																			113				
DMA 17 (IMPERVIOUS)	1,230			1																				1,230			
DMA 17 (PERVIOUS)	1,291			0.1																				129			
DMA 18 (IMPERVIOUS)	2,982			1																					2,982		
DMA 18 (PERVIOUS)	2,227			0.1																					223		
DMA 19 (IMPERVIOUS)	8,105			1																						8,105	
DMA 19 (PERVIOUS)	6,841			0.1																						684	
DMA 20 (IMPERVIOUS)	1,155			1																							1,155
DMA 20 (PERVIOUS)	974			0.1																							97
DMA 21 (SELF TREATING)		21,244		0.1																							
Total DMAs	132,376	-					22,016.40	3385	1842.7	4428	10906	1604.8	3319.2	3650.1	4362.6	4392.5	4834.7	2156.3	1177.6	5001.3	3361.9	1481	1359.1	3204.7	8789.1	1252.4	
							Sizing Factor	0.04																			
							Minimum Size	880.66	135.4	73.708	177.12	436.26	64.192	132.77	146	174.5	175.7	193.39	86.252	47.104	200.05	134.48	59.24	54.364	128.19	351.56	50.096
Total Facilities	21,244	Step 7: Enter Facility Footprints				Footprint on Exhibit	1,050	149	80	180	442	79	167	159	180	264	263	119	65	320	159	76	74	155	399	74	
DMAs + Facilities	153,620	OK					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
							Step 8: Iterate sizes of facility footprints and DMAs until all footprints are at least the minimum AND DMAs + Facilities equals Total Site Area																				
							Step 9: Check to make sure Areas Draining to each Receiving Self-Retaining Area do not exceed maximum 2:1 ratio.																				
							Step 10: Check results on this spreadsheet are consistent with what is shown on the SCP Exhibit.																				



FIGURE 1
VICINITY MAP
 NAPA COVE

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA

DATE: SEPTEMBER 2021



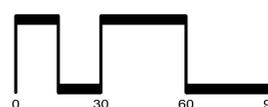
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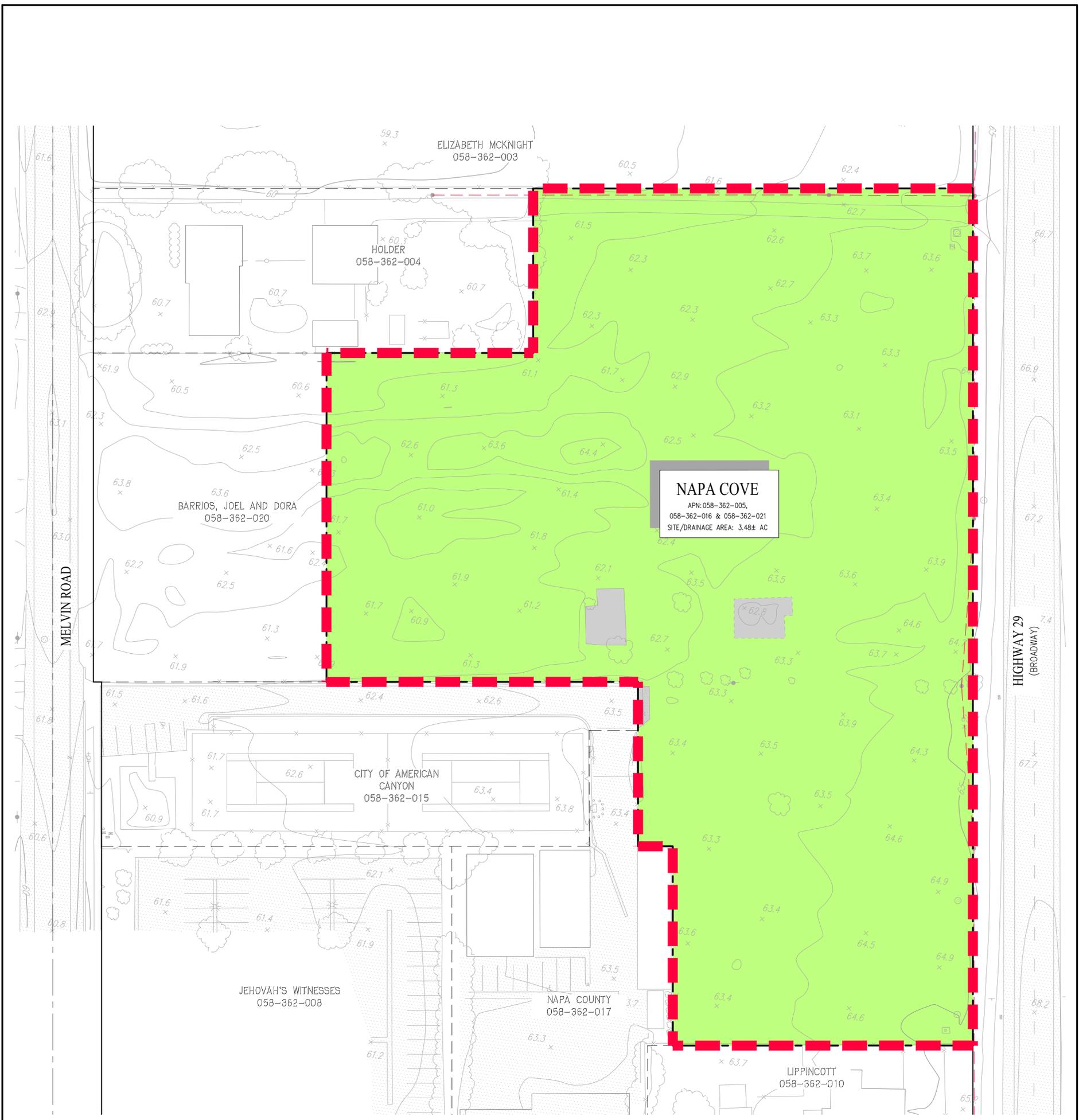


FIGURE 2
AERIAL EXHIBITS
NAPA COVE

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
 SCALE: 1"=30' DATE: SEPTEMBER 2021



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LEGEND

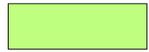
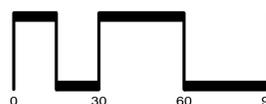
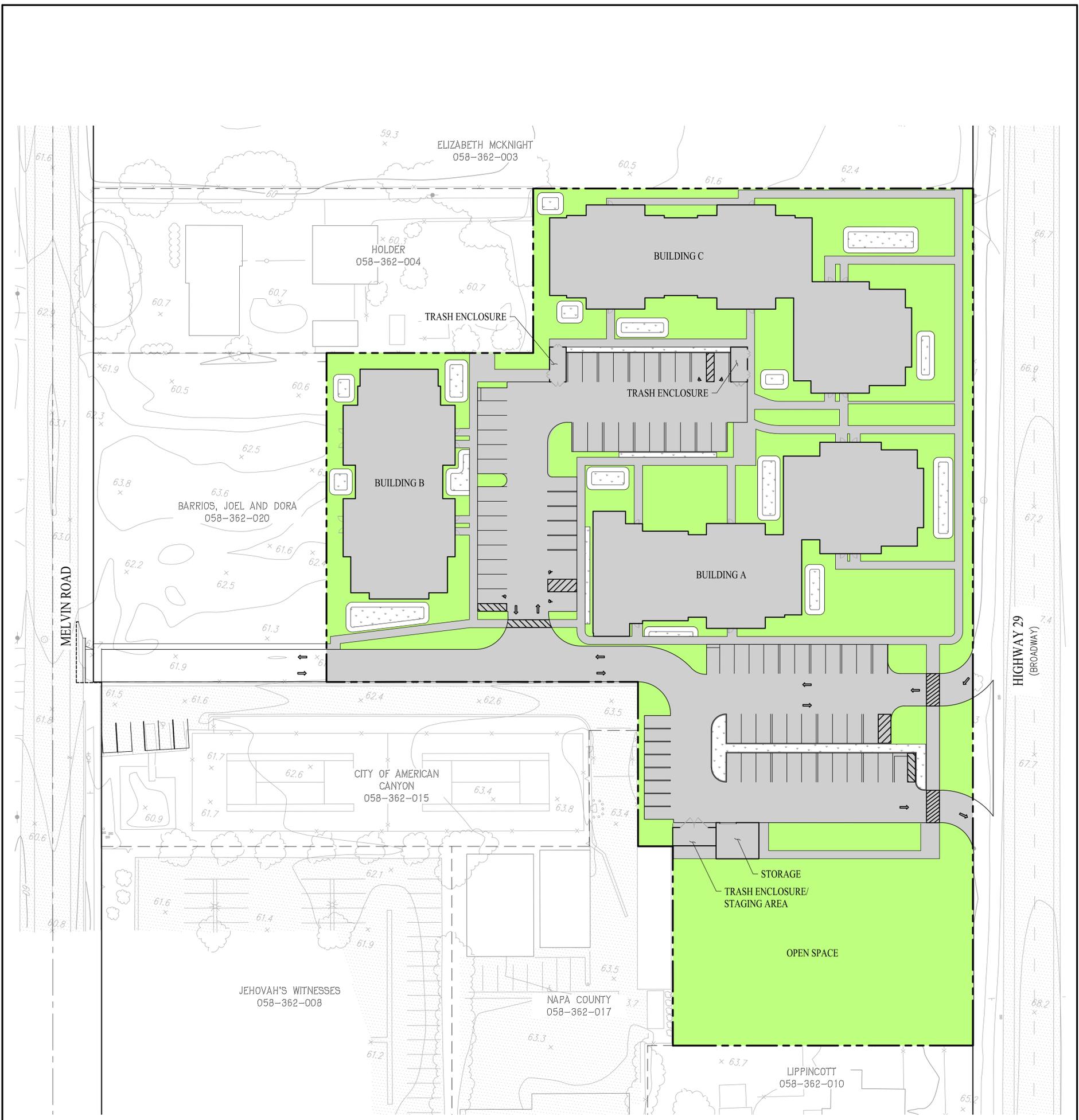
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(3.48± AC)
-  DRAINAGE AREA
(3.48± AC)
-  IMPERVIOUS SURFACE - 1.2%
(0.04± AC)
-  PERVIOUS SURFACE - 98.8%
(3.44± AC)

FIGURE 3
EXISTING CONDITIONS
NAPA COVE

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=30' DATE: SEPTEMBER 2021



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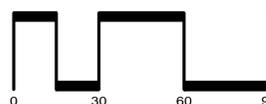
LEGEND

- PROJECT BOUNDARY (3.48± AC)
- IMPERVIOUS SURFACE - 57.2% (1.96± AC)
- PERVIOUS SURFACE - 37.7% (1.34± AC)
- BIORETENTION AREA - 5.1% (0.18± AC)
- PROPOSED STORM DRAIN
- PROPOSED FIELD INLET
- PROPOSED STORM DRAIN MANHOLE

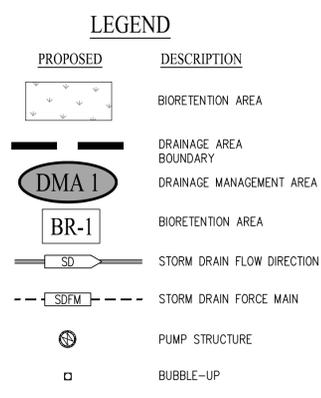
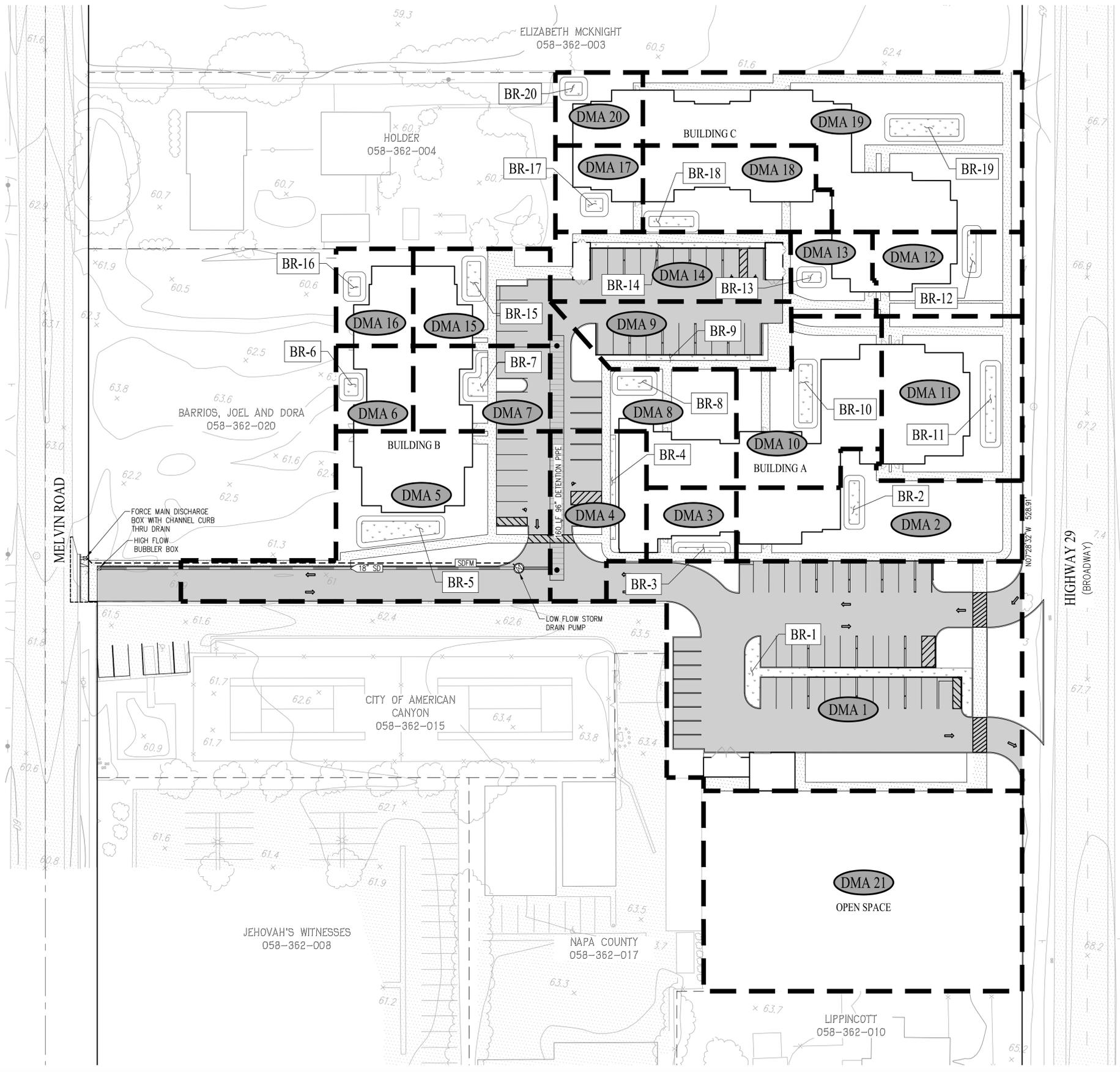
PROPOSED CONDITION SUMMARY			
IMPERVIOUS AREA (SF)			
ROOF AREA (SF)	ASPHALT/CONCRETE AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)
35,146	50,315	85,461	58,335

FIGURE 4
PROPOSED CONDITIONS
NAPA COVE

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=30' DATE: SEPTEMBER 2021

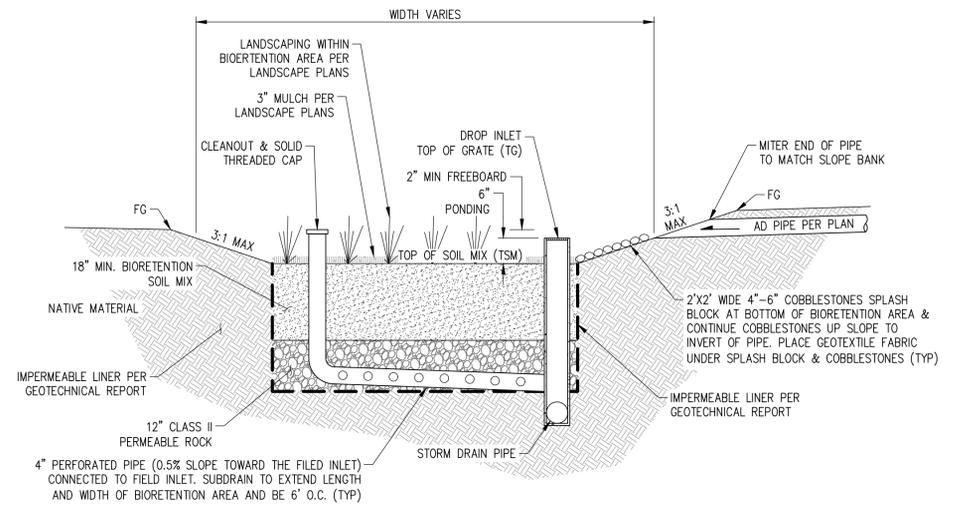


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DRAINAGE MANAGEMENT AREA (DMA)	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	DRAINAGE AREA (SF)	REQUIRED TREATMENT AREA (SF)	PROVIDED TREATMENT AREA (SF)	TREATMENT TYPE
DMA 1	21,371	6,454	27,825	881	1,050	BIORETENTION
DMA 2	2,891	4,940	7,831	135	149	BIORETENTION
DMA 3	1,803	397	2,200	74	80	BIORETENTION
DMA 4	4,374	540	4,914	177	180	BIORETENTION
DMA 5	10,535	3,714	14,249	436	442	BIORETENTION
DMA 6	1,539	658	2,197	64	79	BIORETENTION
DMA 7	3,255	642	3,897	133	167	BIORETENTION
DMA 8	3,365	2,851	6,216	146	159	BIORETENTION
DMA 9	4,318	446	4,764	175	180	BIORETENTION
DMA 10	4,126	2,665	6,791	176	264	BIORETENTION
DMA 11	4,514	3,207	7,721	193	263	BIORETENTION
DMA 12	1,934	2,223	4,157	86	119	BIORETENTION
DMA 13	1,049	1,286	2,335	47	65	BIORETENTION
DMA 14	4,941	603	5,544	200	320	BIORETENTION
DMA 15	3,243	1,189	4,432	134	159	BIORETENTION
DMA 16	1,386	1,112	2,498	60	76	BIORETENTION
DMA 17	1,230	1,291	2,521	54	74	BIORETENTION
DMA 18	2,982	2,227	5,209	128	155	BIORETENTION
DMA 19	8,105	6,841	14,946	352	399	BIORETENTION
DMA 20	1,155	974	2,129	50	74	BIORETENTION
DMA 21	-	21,244	21,244	-	-	SELF-TREATING

- ### NOTES
- VALUES IN THE TABLE ABOVE ARE ESTIMATED BASED UPON THE AVAILABLE INFORMATION AT THE TIME OF THIS MAP.
 - REQUIRED TREATMENT AREAS CALCULATED USING THE 4% RULE WITH A FACTOR OF 1.0 FOR IMPERVIOUS AREAS AND 0.1 FOR PERVIOUS AREAS (NAPA COUNTY IMP SIZING TOOL).



BIORETENTION (TYPICAL)
(NOT TO SCALE)

Appendix K – Preliminary Hydrology Analysis



September 24, 2021
Job No.: 3506-000

MEMORANDUM

TO: City of American Canyon Public Works Department

CC: Shady Fayed - CRP Affordable Housing

FROM: Colt Alvernaz, PE, Associate

SUBJECT: Preliminary Hydrology Analysis
Napa Cove
City of American Canyon, California

The proposed Napa Cove Affordable Multi-Family housing project is comprised of 3 apartment buildings containing 66 dwelling units and shared amenity spaces. The project is located on 3 vacant parcels located between Melvin Road and Highway 29 just north of the City of American Canyon tennis courts. The proposed project site encompasses approximately 3.5 acres.

CBG has completed a preliminary hydrologic analysis of the site to assess how the changes in existing and proposed land cover will impact the downstream stormwater infrastructure at the project location.

STANDARDS AND METHODS

- Engineering Standards Plans and Specifications for Public Improvements, American Canyon Department of Public Works, May 1995
- NRCS TR-55, SCS 24-hr Precipitation Method
- Hydraflow Hydrographs Extension for Autodesk Civil 3D Software, 2020

BACKGROUND AND ASSUMPTIONS

Hydraflow Hydrographs Extension for Autodesk Civil 3D software has been used to determine the sizing of the onsite detention facility to control peak flow runoff from the increased impervious surface of the ultimate developed site. Separate model configurations were created for the pre- and post-development conditions of the site. The overall, comprehensive stormwater management approach will utilize bioretention facilities to provide runoff water quality treatment. Outflow from

the bioretention facilities will be routed to an underground storage pipe that will provide runoff detention capacity to mitigate for potential increases in peak flow due to the increased impervious cover and shorter time of concentration that will characterize the site after construction. Outflow from the underground storage will be regulated by a low flow pump that provide a maximum discharge of the pre-development flow. An emergency overflow pipe and bubble up structure will be installed at Melvin Road to allow any event above the regulated storm to bubble-up and discharge directly to Melvin Road as it has historically. Once the design storm event has dissipated the low flow pump will be used to empty the underground detention pipe. Use of underground detention provides an appropriate means of controlling peak flow rates from the site while maximizing the available land for housing.

The pre-development conditions were represented by a single Drainage Area (DA). For pre-development conditions the project site topography has a maximum elevation of approximately 66 on the east and a minimum elevation of roughly 61 on the west. The overall elevation difference will be maintained in the post-development condition.

Soil data was obtained from the NRCS online Soil Survey. The soil mapping characterizes the main soil class throughout the site as Clear Lake clay (NRCS Hydrologic Soil Group “D”), indicative of high runoff potential.

Time of concentrations (Tc) are predicted to be fairly short given the small site. As a conservative approach the pre-development Tc was set to 20 minutes and that for the post-development was set to 10 minutes.

Design storm precipitation data was taken from NOAA’s Precipitation Frequency Data Server. Design storms assessed include the 2-year, 24-hour event to demonstrate the hdromodification management as per Provision E.12 of the State-wide MS4 Stormwater Permit. Additionally, the 10-year and 100-year, 24-hour design storms were also run to demonstrate peak flow control as pertinent to downstream storm drain facilities.

Model Input Summary

	Area (Ac)	CN	Tc (Min)	2 yr (in)	10 yr (in)	100 yr (in)
Pre-Development	3.5	89	20	2.52	3.91	6.06
Post-Development	3.5	98	10	2.52	3.91	6.06

Detention Pipe Summary

The proposed detention pipe is a 160’ of 96” Diameter corrugated metal pipe, yielding approximately 8,040 cubic feet of storage. The outflow to the pump wet-well will be controlled by a in-pipe riser with a 4.5” orifice and 4’ circumference riser at an elevation 7’ above the detention invert.

MODEL RESULTS

Peak flow output results from the *Hydraflow Hydrographs Extension for Autodesk Civil 3D* software are summarized in the table below and show the outflows for the pre-, post- and mitigated condition summary.

	Pre-Development (cfs)	Post-Development (cfs)	Mitigated Flow (cfs)
2 Yr – 24 Hr	0.85	1.397	0.743
10 Yr – 24 Hr	1.923	2.643	1.093
100 Yr – 24 Hr	3.745	4.606	4.456

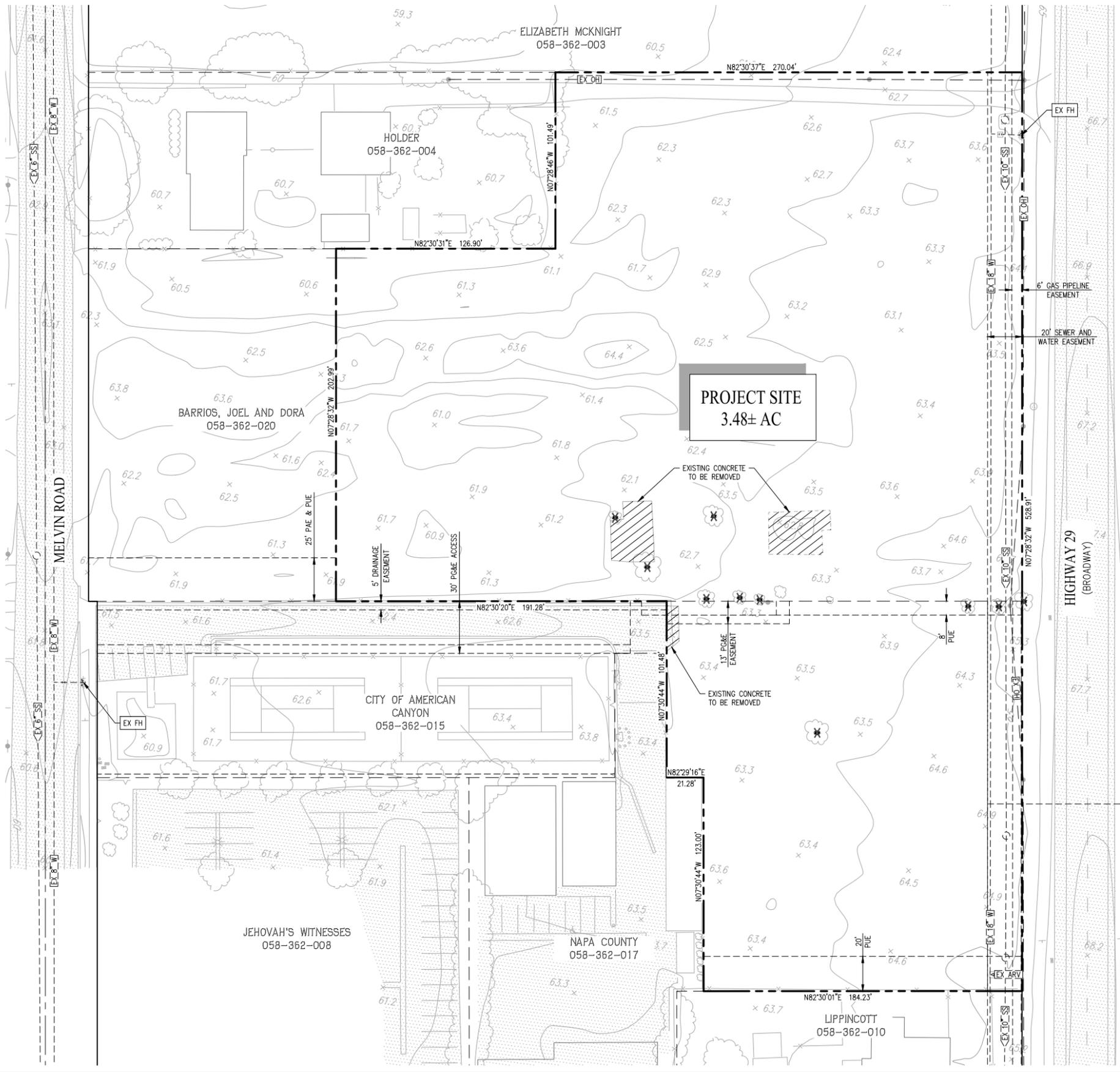
As the above table indicates, the detention facility reduces the proposed conditions peak flow rates are reduced compared to the pre-development condition.

CONCLUSION

Based upon the modeled outcomes for the project site, the Napa Cove development will not create any adverse effects on the storm drain system downstream of the project. The storage provided by the underground detention facility regulates the flow from the project area to a point where the local and state regulatory standards are met.

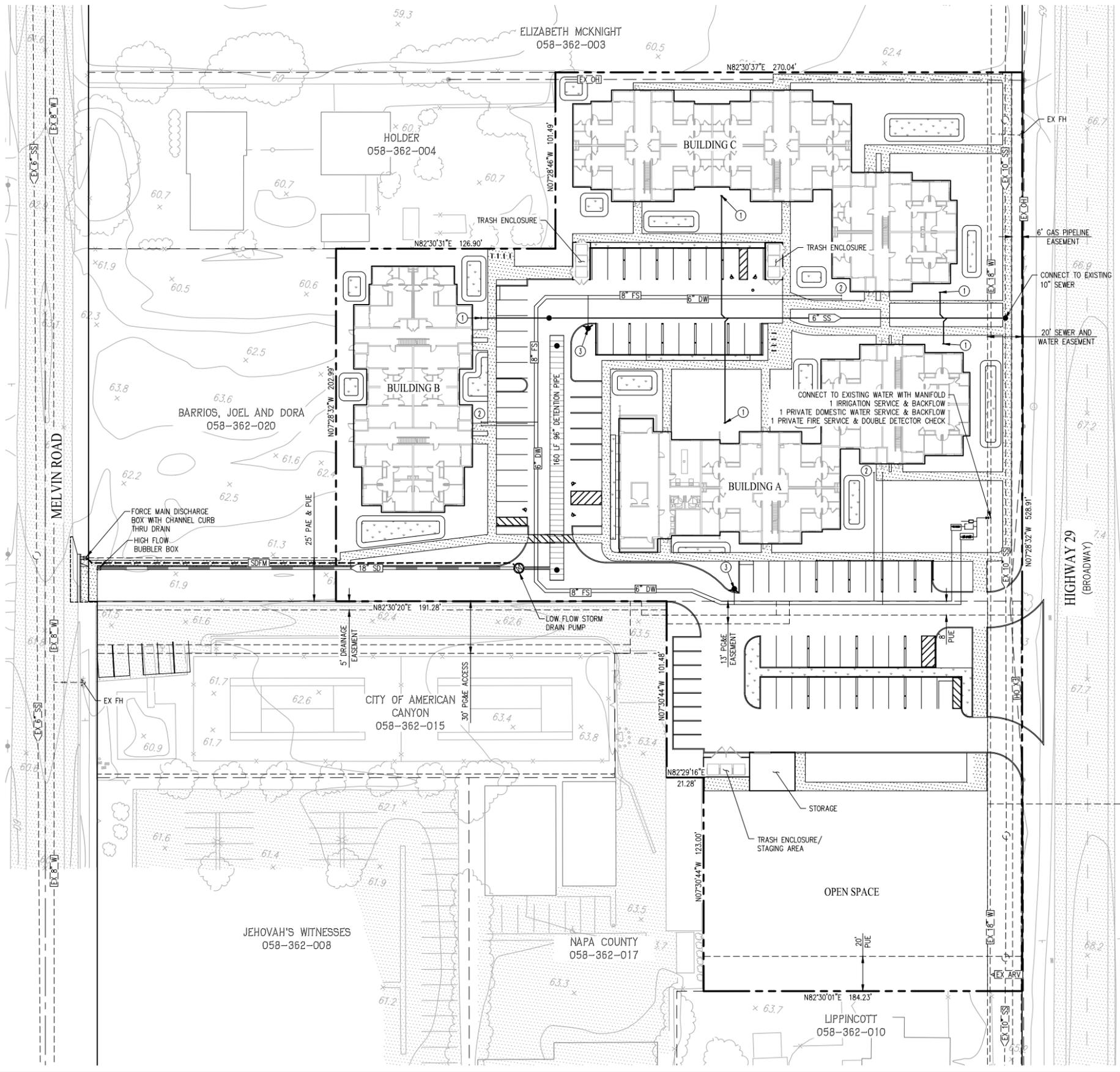
ATTACHMENTS

- Napa Cove Existing Condition Plan
- Napa Cove Preliminary Utility Plan
- Software Output Hydrographs



LEGEND

- [EX OH] - EX OVERHEAD WIRE
- [EX SS] - EX SANITARY SEWER PIPE
- [EX W] - EX WATER MAIN
- ▽ [EX ARV] EX AIR RELEASE VALVE
- ✕ EX TREE TO BE REMOVED
- EX FIRE HYDRANT
- EX SANITARY SEWER MANHOLE



LEGEND

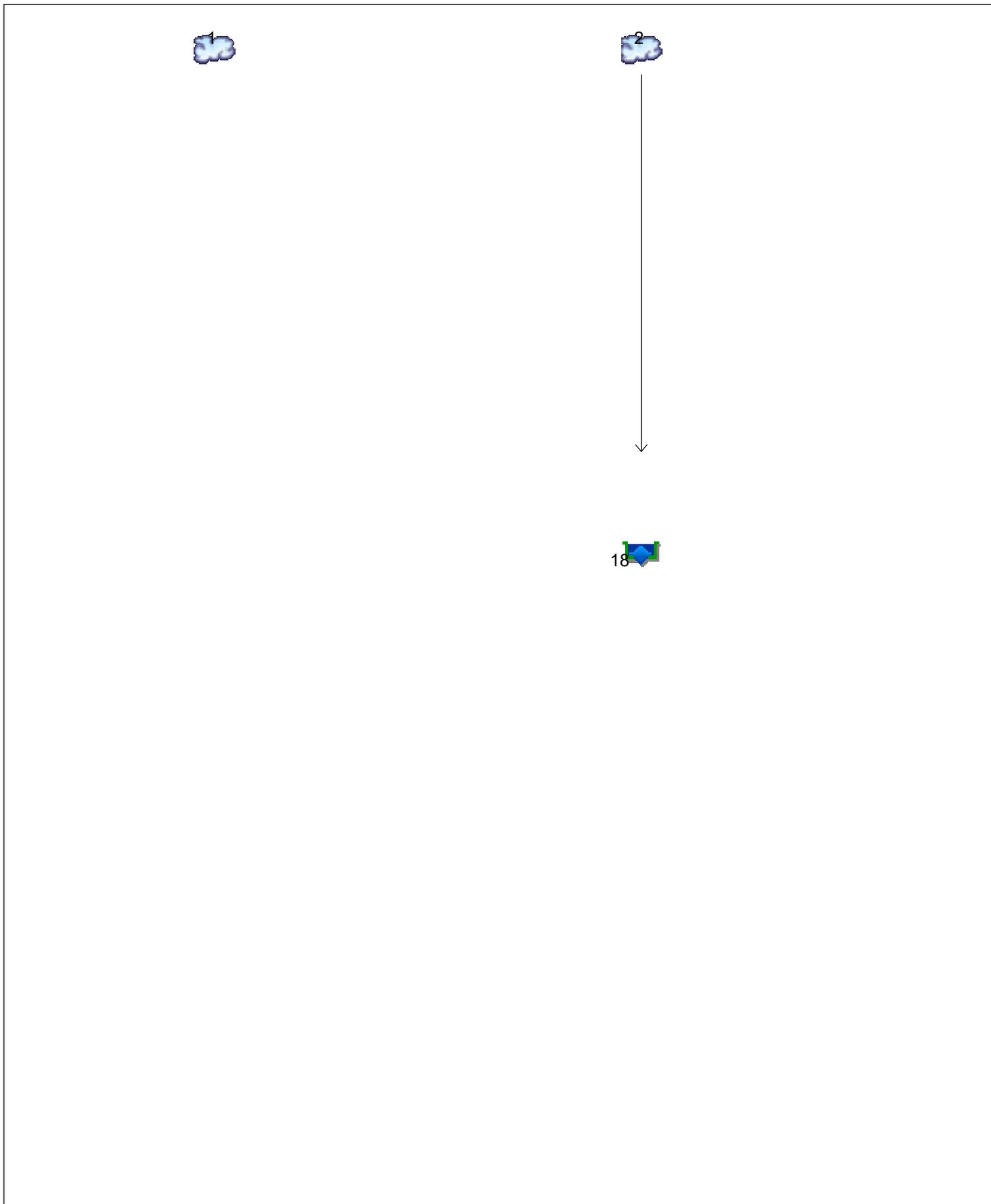
EXISTING	PROPOSED	DESCRIPTION
- EX 6" SS -	18" SD	STORM DRAIN PIPE
- EX 8" W -	6" SS	SANITARY SEWER PIPE
	6" DW	WATER MAIN
	6" DW	DOMESTIC WATER
	8" FS	FIRE SERVICE
		AIR RELEASE VALVE
		SIDEWALK
		FIRE HYDRANT
		MANHOLE

NOTES

- ① BUILDING SEWER POINT OF CONNECTION (SUBJECT TO CHANGE AT BUILDING PERMIT)
- ② BUILDING DOMESTIC & FIRE WATER POINT OF CONNECTION (SUBJECT TO CHANGE AT BUILDING PERMIT)
- ③ PROPOSED PRIVATE FIRE HYDRANT

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020



Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

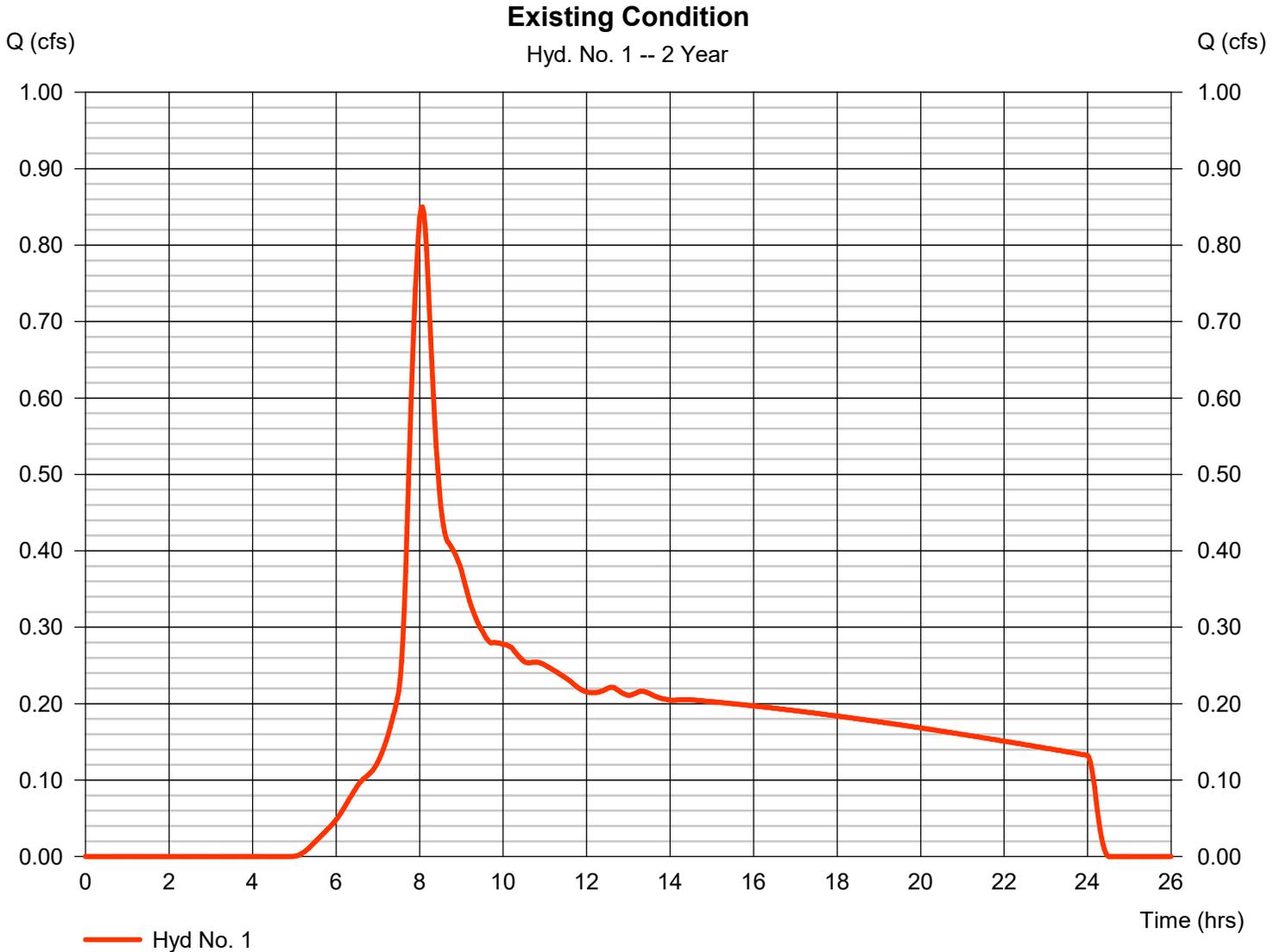
Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	-----	0.850	-----	-----	1.923	-----	-----	3.745	Existing Condition
2	SCS Runoff	-----	-----	1.397	-----	-----	2.643	-----	-----	4.606	Developed
18	Reservoir	2	-----	0.743	-----	-----	1.093	-----	-----	4.456	Mitigated

Hydrograph Report

Hyd. No. 1

Existing Condition

Hydrograph type	= SCS Runoff	Peak discharge	= 0.850 cfs
Storm frequency	= 2 yrs	Time to peak	= 8.07 hrs
Time interval	= 2 min	Hyd. volume	= 14,376 cuft
Drainage area	= 3.500 ac	Curve number	= 84
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.00 min
Total precip.	= 2.52 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

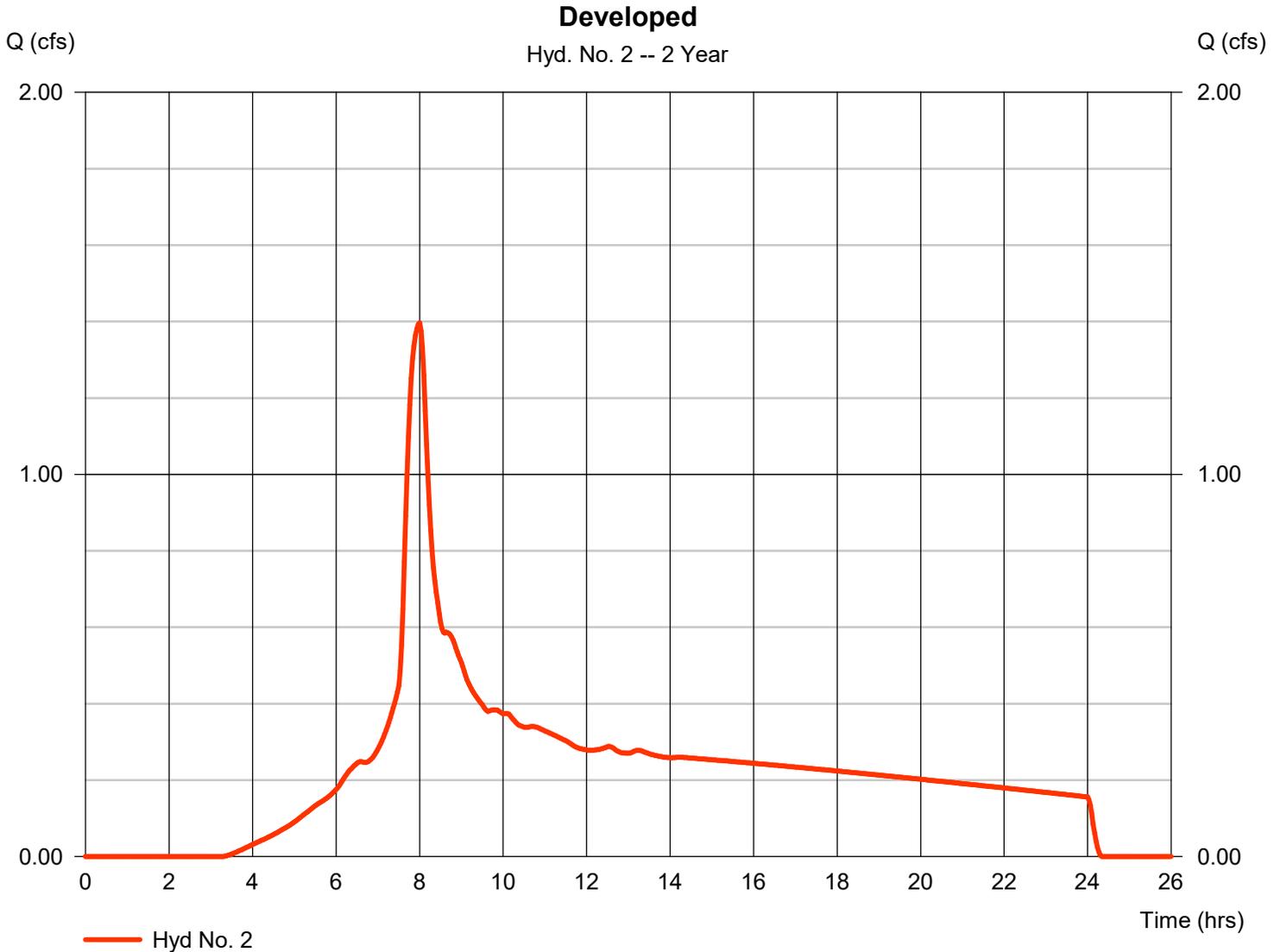
Monday, 09 / 27 / 2021

Hyd. No. 2

Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 1.397 cfs
Storm frequency	= 2 yrs	Time to peak	= 8.00 hrs
Time interval	= 2 min	Hyd. volume	= 20,293 cuft
Drainage area	= 3.500 ac	Curve number	= 90*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 2.52 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(2.000 x 84) + (1.500 x 98)] / 3.500



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

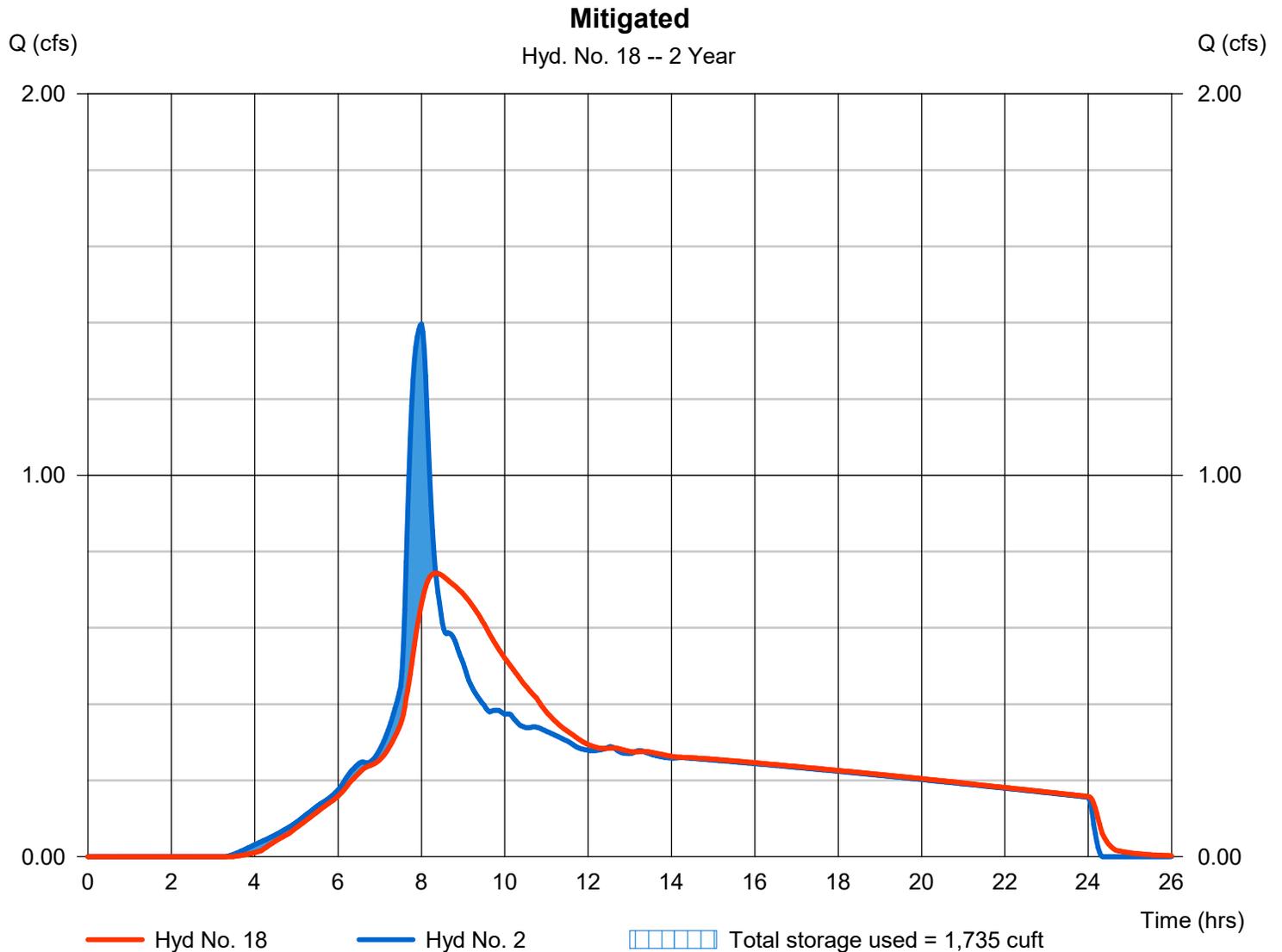
Monday, 09 / 27 / 2021

Hyd. No. 18

Mitigated

Hydrograph type	= Reservoir	Peak discharge	= 0.743 cfs
Storm frequency	= 2 yrs	Time to peak	= 8.33 hrs
Time interval	= 2 min	Hyd. volume	= 20,290 cuft
Inflow hyd. No.	= 2 - Developed	Max. Elevation	= 3.14 ft
Reservoir name	= Detention	Max. Storage	= 1,735 cuft

Storage Indication method used.



Hydrograph Report

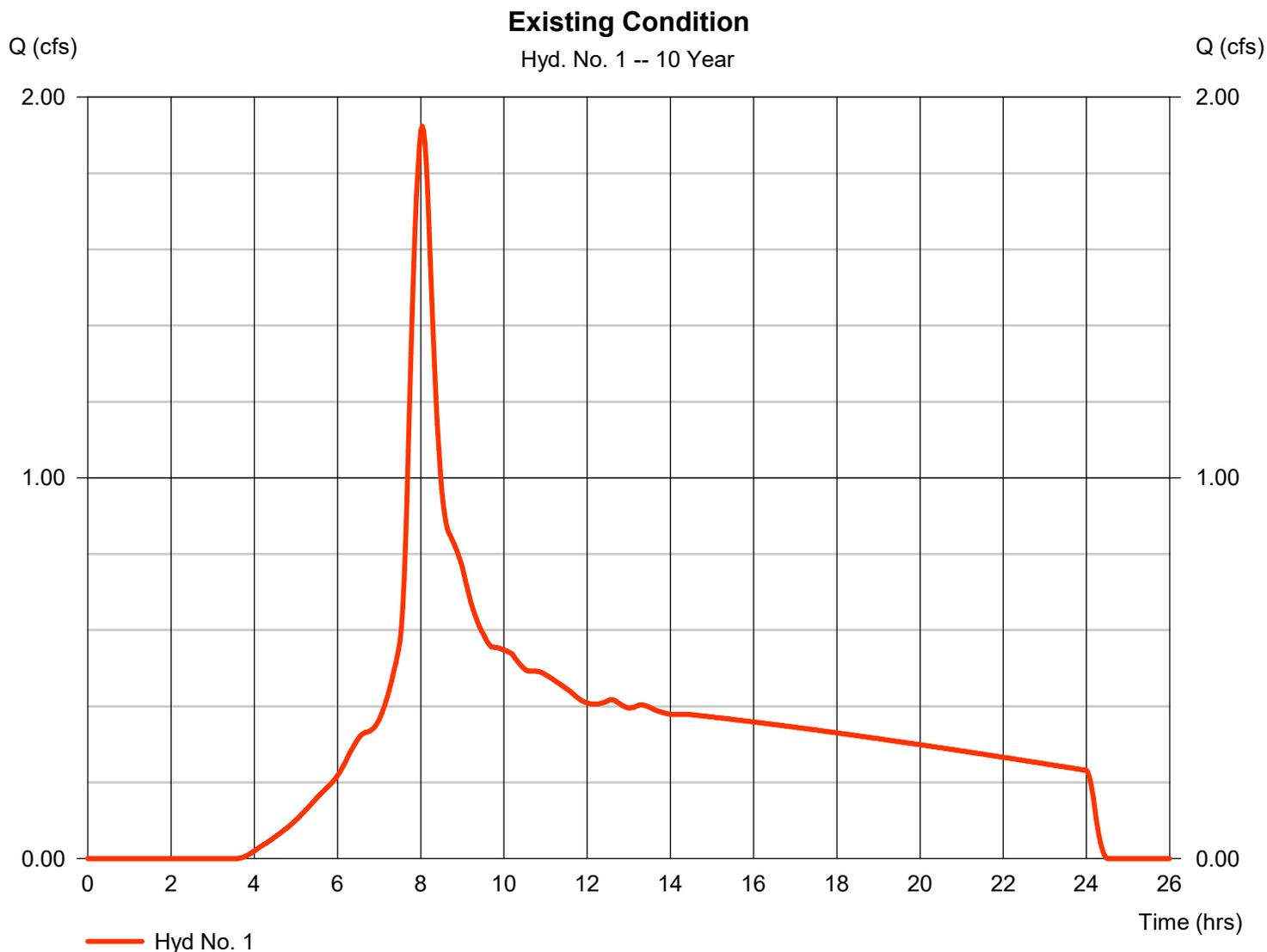
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Monday, 09 / 27 / 2021

Hyd. No. 1

Existing Condition

Hydrograph type	= SCS Runoff	Peak discharge	= 1.923 cfs
Storm frequency	= 10 yrs	Time to peak	= 8.03 hrs
Time interval	= 2 min	Hyd. volume	= 29,120 cuft
Drainage area	= 3.500 ac	Curve number	= 84
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.00 min
Total precip.	= 3.91 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

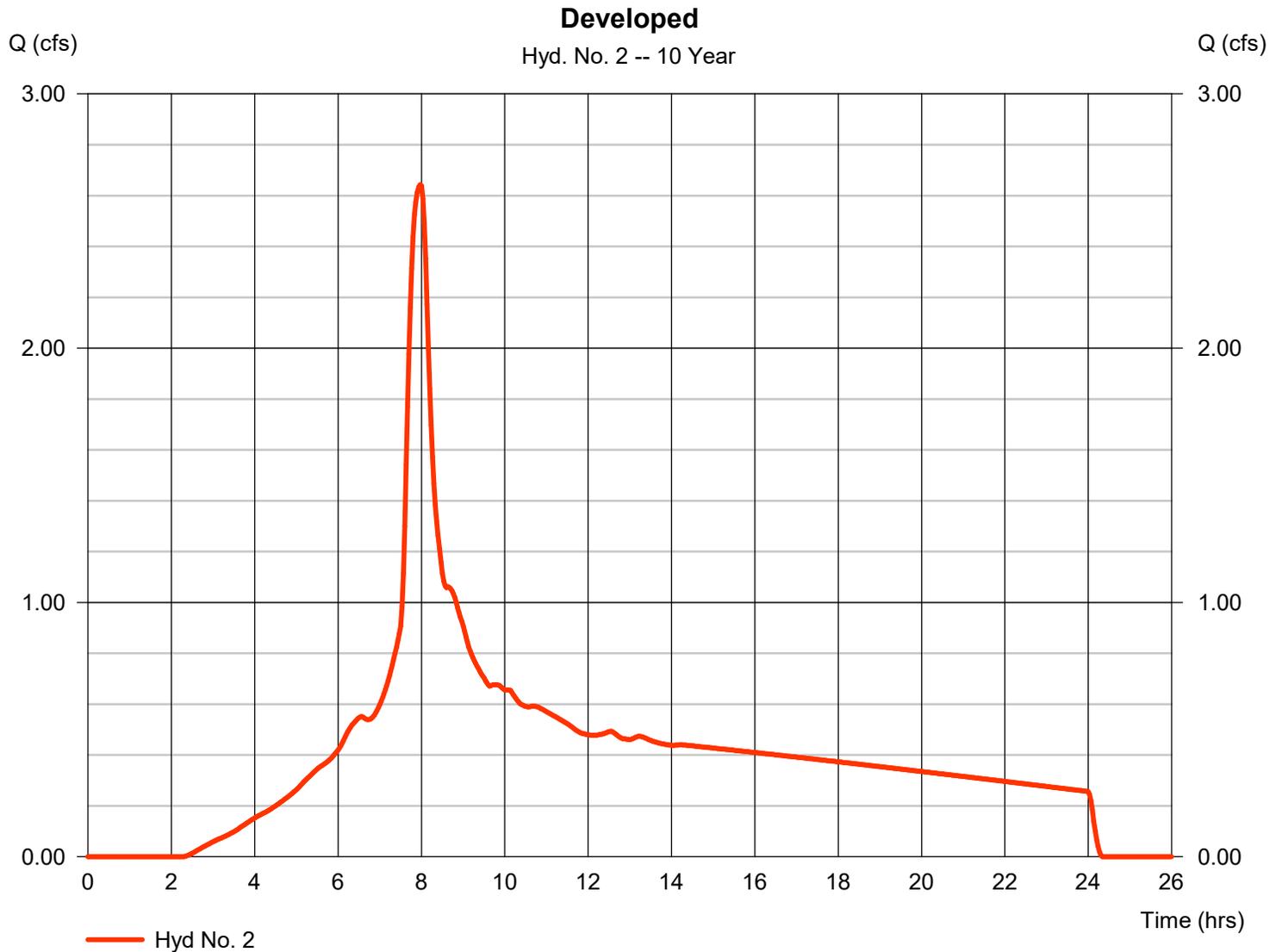
Monday, 09 / 27 / 2021

Hyd. No. 2

Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 2.643 cfs
Storm frequency	= 10 yrs	Time to peak	= 7.97 hrs
Time interval	= 2 min	Hyd. volume	= 37,130 cuft
Drainage area	= 3.500 ac	Curve number	= 90*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 3.91 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(2.000 x 84) + (1.500 x 98)] / 3.500



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

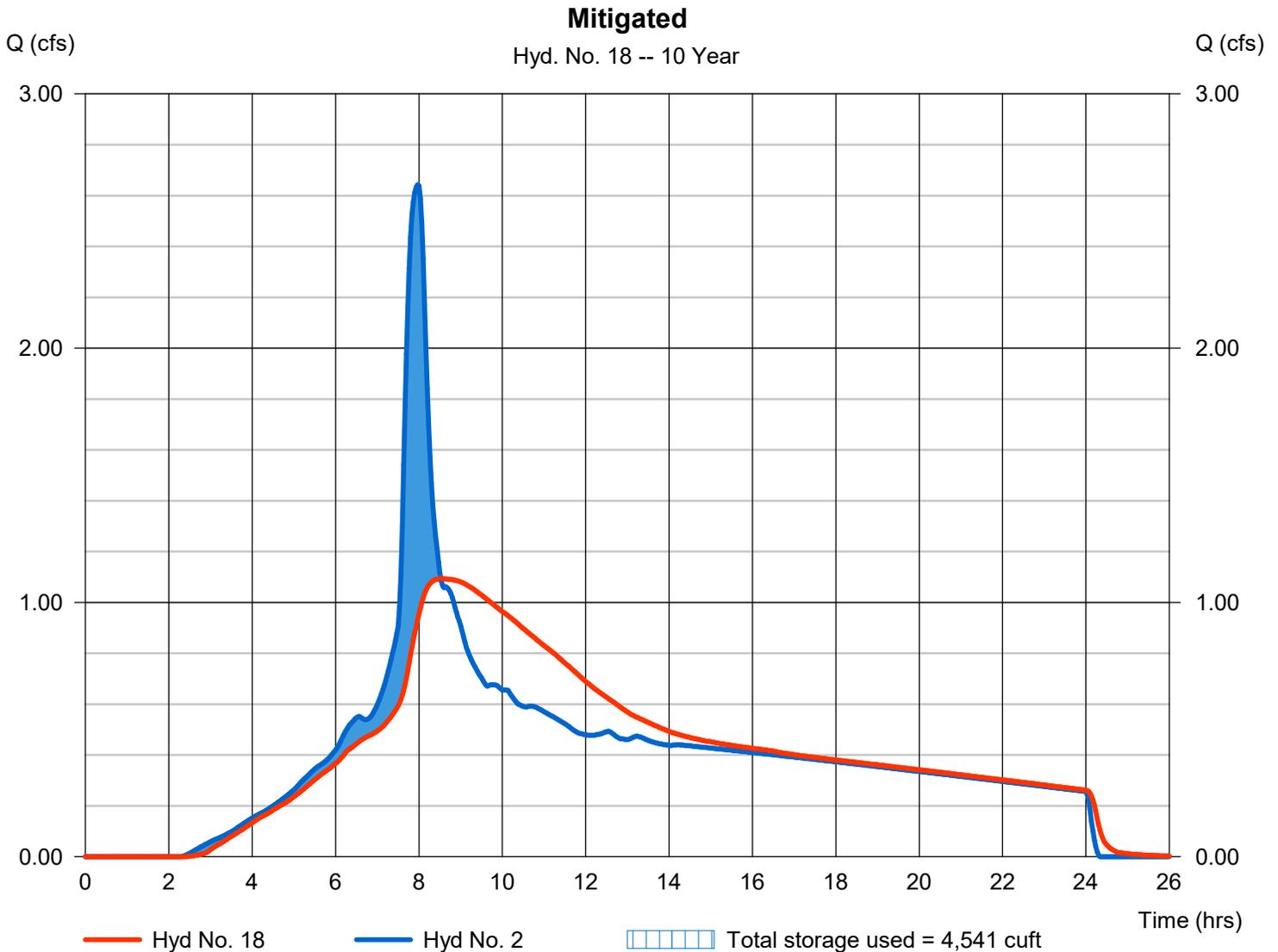
Monday, 09 / 27 / 2021

Hyd. No. 18

Mitigated

Hydrograph type	= Reservoir	Peak discharge	= 1.093 cfs
Storm frequency	= 10 yrs	Time to peak	= 8.53 hrs
Time interval	= 2 min	Hyd. volume	= 37,128 cuft
Inflow hyd. No.	= 2 - Developed	Max. Elevation	= 5.41 ft
Reservoir name	= Detention	Max. Storage	= 4,541 cuft

Storage Indication method used.



Hydrograph Report

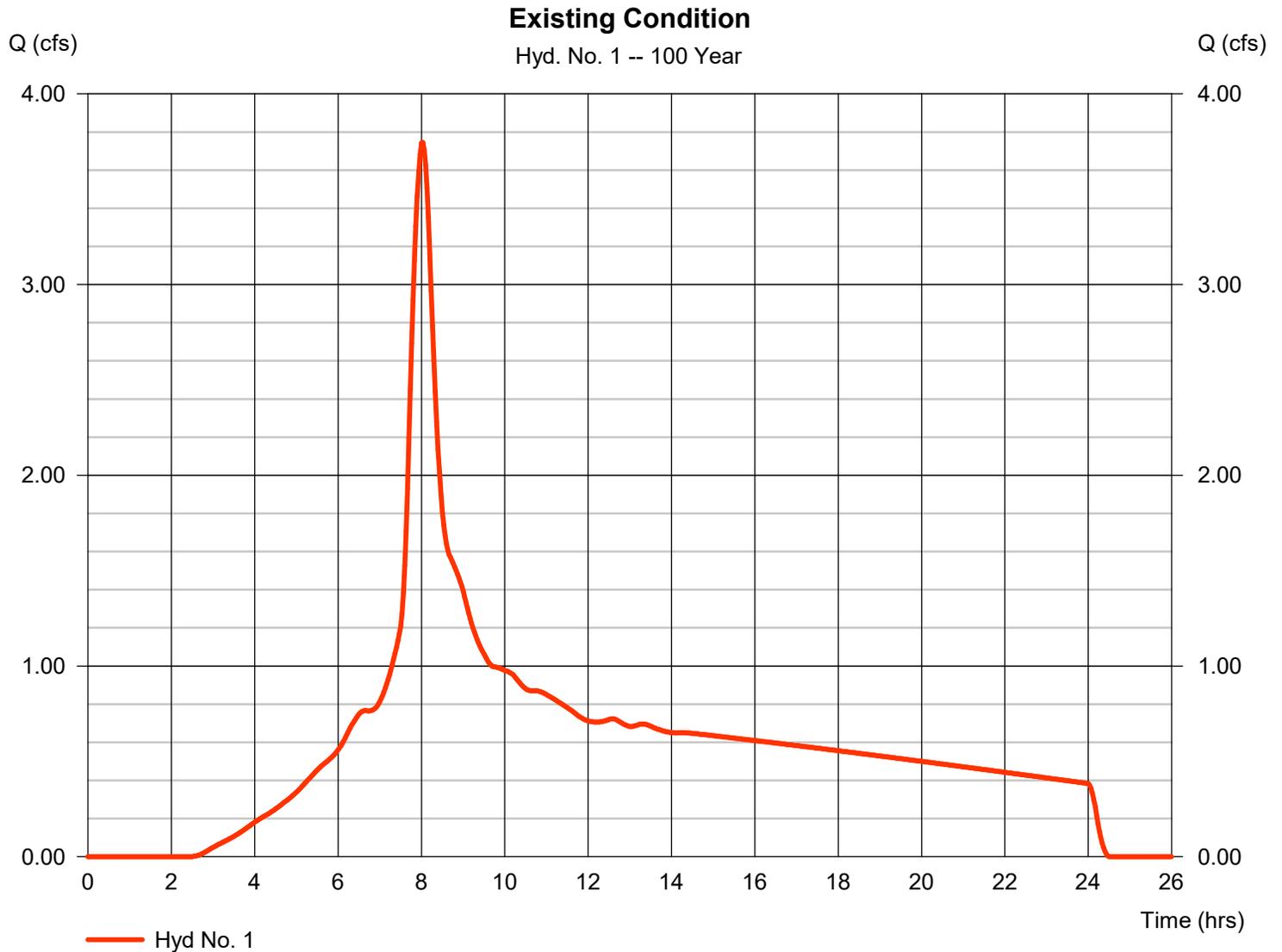
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Monday, 09 / 27 / 2021

Hyd. No. 1

Existing Condition

Hydrograph type	= SCS Runoff	Peak discharge	= 3.745 cfs
Storm frequency	= 100 yrs	Time to peak	= 8.03 hrs
Time interval	= 2 min	Hyd. volume	= 54,030 cuft
Drainage area	= 3.500 ac	Curve number	= 84
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.00 min
Total precip.	= 6.06 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

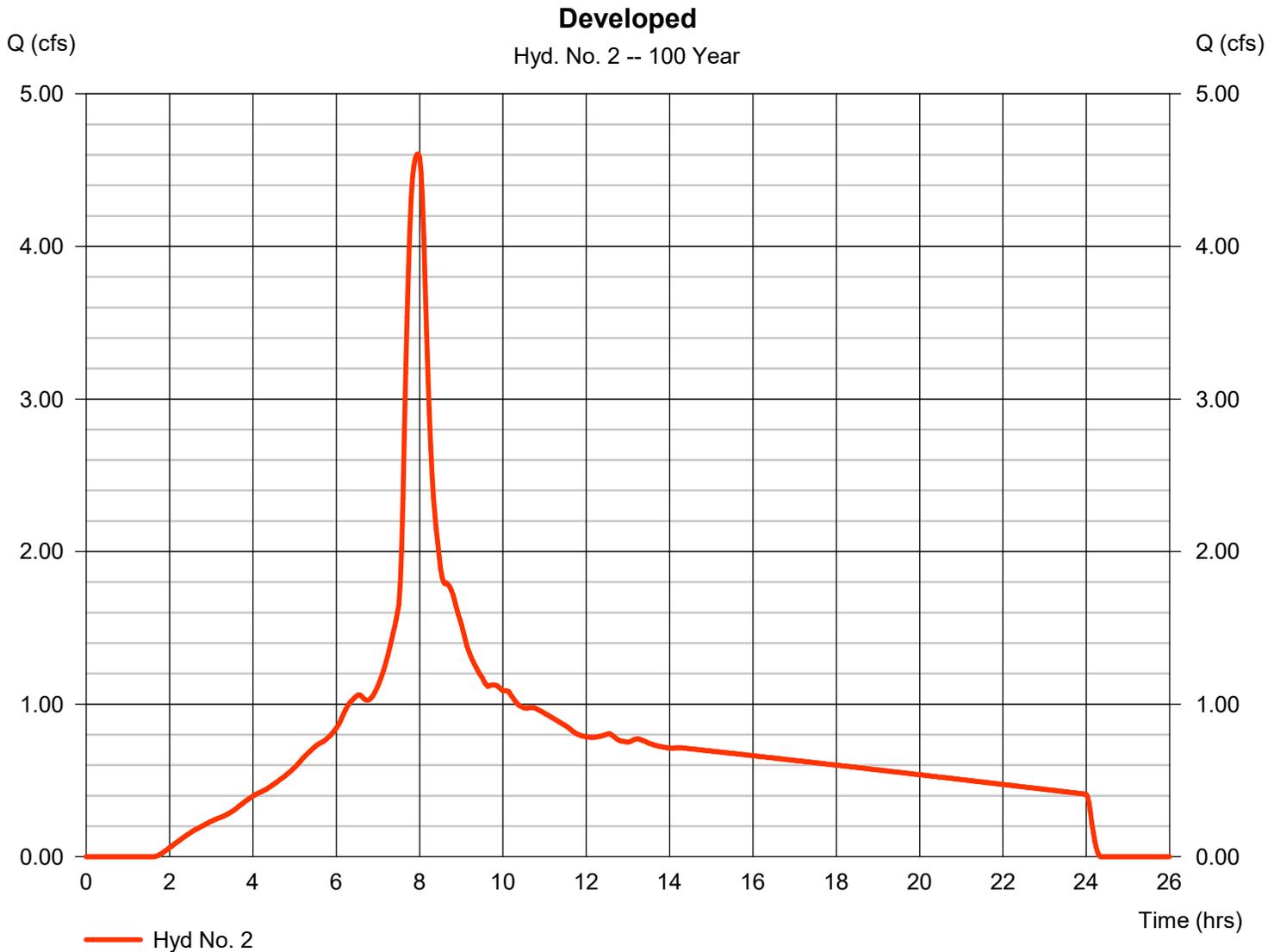
Monday, 09 / 27 / 2021

Hyd. No. 2

Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 4.606 cfs
Storm frequency	= 100 yrs	Time to peak	= 7.97 hrs
Time interval	= 2 min	Hyd. volume	= 64,257 cuft
Drainage area	= 3.500 ac	Curve number	= 90*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 6.06 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(2.000 x 84) + (1.500 x 98)] / 3.500



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

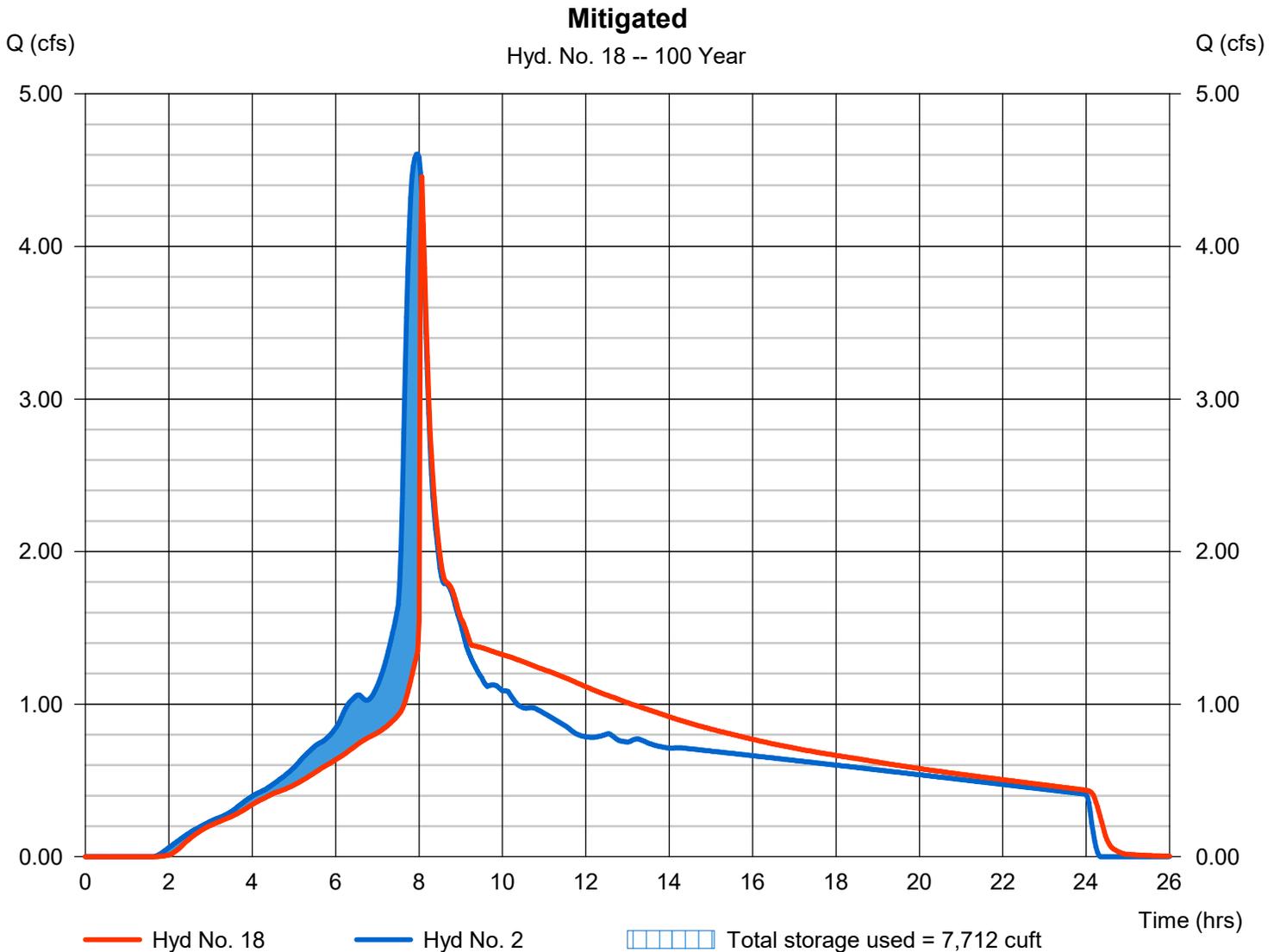
Monday, 09 / 27 / 2021

Hyd. No. 18

Mitigated

Hydrograph type	= Reservoir	Peak discharge	= 4.456 cfs
Storm frequency	= 100 yrs	Time to peak	= 8.07 hrs
Time interval	= 2 min	Hyd. volume	= 64,254 cuft
Inflow hyd. No.	= 2 - Developed	Max. Elevation	= 8.37 ft
Reservoir name	= Detention	Max. Storage	= 7,712 cuft

Storage Indication method used.



Appendix L – Noise and Vibration Assessment

NOISE AND VIBRATION ASSESSMENT

NAPA COVE APARTMENTS

AFFORDABLE HOUSING PROJECT

3805 Broadway, American Canyon, California

September 21, 2021

Prepared for:

**Shady Fayed, Director
CRP Affordable Housing & Community Development
4455 Morena Blvd Suite #107
San Diego, CA 92117**

Prepared by:

Fred M. Svinth, INCE, Assoc., AIA

ILLINGWORTH & RODKIN, INC.
//// Acoustics • Air Quality ////

429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Project 21-127

INTRODUCTION

The Napa Cove Apartments project is an affordable housing development located west of Broadway (Hwy 29), east of Melvin Road and north of Donaldson Way in the City of American Canyon as shown in Figure 1.

The site is currently vacant, with residential and recreational uses to the south, residential uses to the west, residential and commercial uses to the north, and commercial, religious and hotel uses across Hwy 29 to the east. The proposed project would construct a total of 66 affordable housing units in three two- to three-story buildings and a community building on the site.

This report evaluates the project's compatibility with the onsite noise environment and the project's potential to result in significant noise and vibration impacts with respect to



Figure 1: Project Site and Surroundings

applicable City of American Canyon, U.S. Department of Housing and Urban Development (HUD), The State of California Building Code, and the California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency Analysis section discusses noise and land use compatibility utilizing policies in the City's General Plan; and 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts, provides a discussion of each project impact, and presents measures, where necessary, to mitigate the impacts of the project on sensitive receptors in the vicinity.

SETTING

FUNDAMENTALS OF ENVIRONMENTAL NOISE

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which

indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA)*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a

method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation (CalTrans), September 2013.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from

the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level (L_{dn} or DNL)* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn} . Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57 to 62 dBA L_{dn} with open windows and 65 to 70 dBA L_{dn} if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn} . At a L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25 to 30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a L_{dn} of 60 to 70 dBA. Between a L_{dn} of 70 to 80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30 to 35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3

percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

FUNDAMENTALS OF GROUNDBORNE VIBRATION

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, CalTrans, September 2013.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most

at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

REGULATORY BACKGROUND - NOISE

The Federal Government (HUD), the State of California, and the City of American Canyon have established regulatory criteria that are applicable in this assessment. The California Environmental Quality Act (CEQA) Guidelines, Appendix G, are used to assess the potential significance of impacts pursuant to local General Plan policies, or the applicable standards of other agencies. A summary of the applicable regulatory criteria is provided below.

Federal Guidance

The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24CFR Part 51B (Code of Federal Regulations). The following exterior noise standards for new housing construction would be applicable to this project:

- 65 dBA L_{dn} or less are acceptable at common outdoor use areas
- Noise Level exceeding 65 dBA L_{dn} but not 75 dBA L_{dn} are considered normally unacceptable for outdoor use. With this noise exposure appropriate sound attenuation measures must be included in the project which provide an additional 5 decibels of attenuation over that typically provided by standard construction in the 65 dBA L_{dn} to 70 dBA L_{dn} zone and 10 decibels of additional attenuation in the 70 dBA L_{dn} to 75 dBA L_{dn} zone.
- Exceeding 75 dBA L_{dn} – unacceptable.

These noise standards also apply, “... at a location 2 meters from the building housing noise sensitive activities in the direction of the predominant noise source...” and “...at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site.” Pursuant to the HUD Guidelines, the noise exposure at least 10 years in the future must be considered in addition to the existing noise exposure.

State Guidance

State CEQA Guidelines. CEQA contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

- (a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies;
- (b) Generation of excessive groundborne vibration or groundborne noise levels; or
- (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, if the project would expose people residing or working in the project area to excessive noise levels.

California Building Code, Title 24, Part 2.

Section 1206.4 of the current (2019) California Building Code (CBC) states that interior noise levels attributable to exterior sources shall not exceed 45 dB(A) L_{dn} or CNEL (consistent with the noise element of the local general plan) in any habitable room of a residential dwelling. Though this section does not explicitly apply this interior limit to multifamily residential buildings, in keeping with the requirements of prior editions of the CBC this limit is applied to any habitable room for new dwellings other than detached single-family dwellings.

Local Guidance

City of American Canyon General Plan. The Noise Element of the City of American Canyon General Plan sets forth policies with the goal to 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. The following objectives and policies contained in the Noise Element are applicable to the proposed project:

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

- 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.
- 11.2.2 Enforce the California Noise Insulation Standards (Title 25, California Administrative Code) that apply to new multiple family, hotel, motel, dormitory, and long-term care developments with a L_{dn} of 60 dB(A) noise contour adjacent to roads, transit lines, and manufacturing areas to ensure that the units have been designed to limit interior noise levels in habitable rooms to a L_{dn} of 45 dB(A) with doors and windows closed.
- 11.2.3 Require that air conditioning units and pool equipment within residential areas be designed and sited in a manner that does not intrude upon the peace and quiet of adjacent noise-sensitive uses.
- 11.2.7 Encourage "noise-sensitive" uses, including schools, libraries, health care facilities, and residential developments, to incorporate fences, walls, landscaping, and/or other noise buffers and barriers to mitigate noise impacts where appropriate and feasible.
- 11.2.8 Consider alternate land uses or mitigation measures if large walls or other physical barriers are required to mitigate noise impacts that will affect or be caused by a proposed development project.
- 11.2.9 Require the utilization of site and architectural design features in conjunction with noise barriers to mitigate impacts on sensitive land uses. Design techniques capable of mitigating potential noise impacts include:
- a. Site Design
 - Using building setbacks and dedicating noise easements to increase the distance between the noise source and receiver,
 - Locating uses and orienting buildings that are compatible with higher noise levels adjacent to noise generators or in clusters to shield more noise-sensitive areas and uses,

- Placing noise tolerant land uses, such as parking areas, between noise sources and receivers,
- Using noise tolerant structures, such as garages or carports, to shield noise- sensitive areas, and
- Clustering office, commercial, or multiple family residential structures to reduce interior open space noise levels.

b. Architectural Design

- Using dense building materials and tight-fitting doors,
- Employing double glazed and double pane windows,
- Placing unopenable windows on the side of the structure facing a major roadway and entry doors on the side of the building facing away from the major roadway, and
- Avoiding balconies and patio areas facing major transportation routes.

Objective

11.7 Minimize the impacts of construction noise on adjacent uses.

Policies

11.7.1 Limit non-emergency construction activities adjacent to existing noise-sensitive uses to daylight hours between 6:30 AM and 8:00 PM.

11.7.2 Require construction activities to employ practical techniques and practices that minimize the generation of adverse and/or excessive noise impacts on adjacent land uses.

City of American Canyon Municipal Code. Section 8.12.070 of the City’s Municipal Code establishes exterior noise standards for residential dwelling units generated by noise sources outside the dwelling unit, as seen below in Table 8.12.070. These standards limit noise levels which are exceeded more than thirty minutes in any hour (or the L₅₀ as defined in Table 1, above) at multi-family residences to 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA at night (10:00 p.m. to 7:00 a.m.).

Table 8.12.070: Exterior Noise Limits

Type of Land Use	Time Interval	Allowable Exterior Noise Level, L ₅₀ , dBA
Residential Single and double	10 p.m. — 7 a.m.	50
	7 a.m. — 10 p.m.	60
Residential multiple	10 p.m. — 7 a.m.	55
	7 a.m. — 10 p.m.	60

Section 8.12.080.B.2 establishes specific prohibitions for construction activities as follows:

- Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of seven p.m. and seven a.m., such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the appropriate authority.
- Noise Restrictions at Affected Properties. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in the following schedule:

Table 8.12.080: Noise Limits for Construction Activities

Timeframe	Residential	Commercial	Industrial
Daily: 7 a.m. to 7 p.m.	75 dBA	80 dBA	85 dBA
Daily: 7 p.m. to 7 a.m.	60 dBA	65 dBA	70 dBA

EXISTING NOISE ENVIRONMENT

The project site is located west of Hwy 29, east of Melvin Road, and north of Donaldson Way in American Canyon, California. The site is currently vacant, with residential and recreational uses to the south, residential uses to the west, residential and commercial uses to the north, and commercial, religious and hotel uses across Hwy 29 to the east. The existing noise environment at the site and in the vicinity results primarily from traffic on Hwy 29 with localized noise contributions from traffic on Melvin Road.

A noise monitoring survey was conducted to quantify the existing noise environment at the site over a 50-hour period between 9 am on August 18th and 11 am on August 20th, 2021. The noise monitoring survey included two long-term measurements (LT-1 and LT-2). One of the long-term measurements was made on the project Hwy 29 frontage and the other on the opposite side of along Melvin Road from the project. Figure 2 shows these noise monitoring locations.

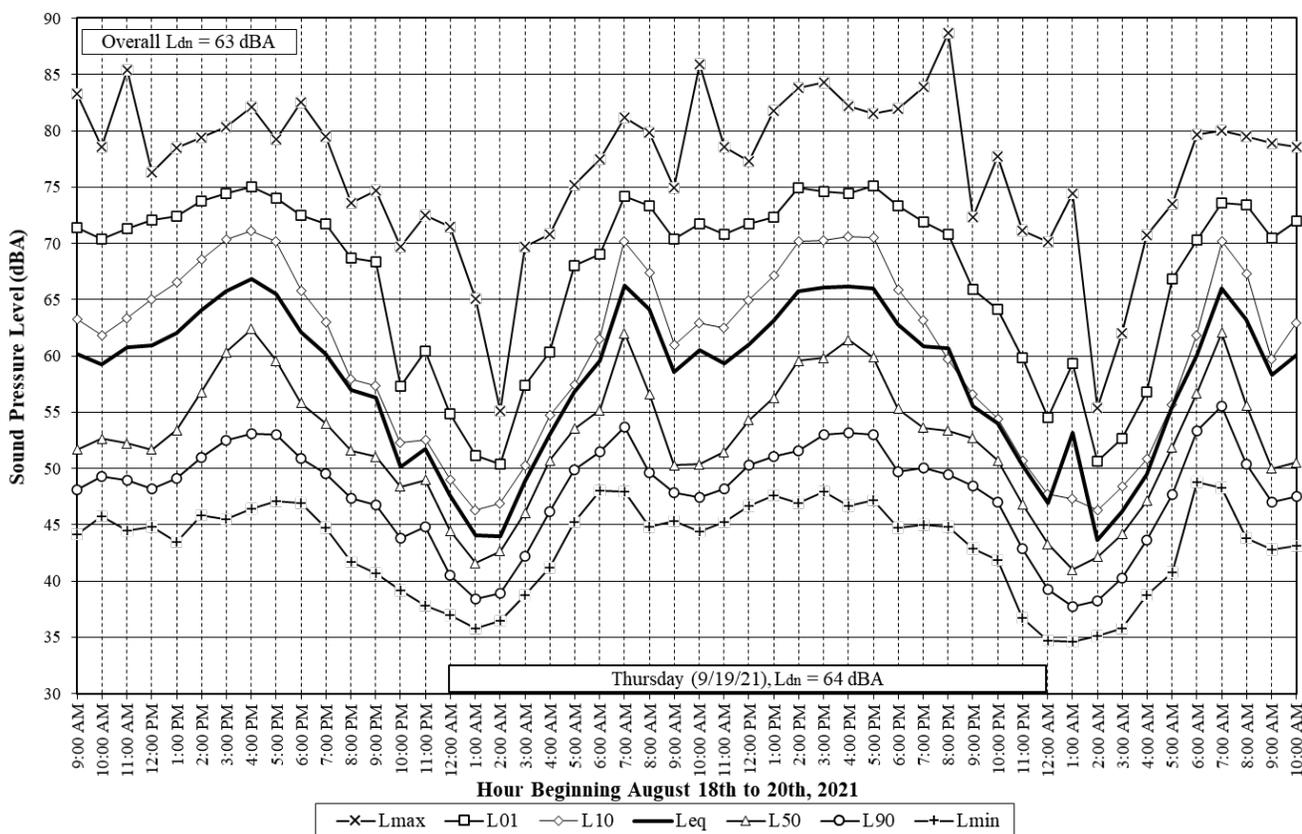


Figure 2: Site Aerial with Project Plan and Measurement Locations

The noise measurements were conducted with Larson Davis Laboratories (LDL) Model 820 and LXT Type I Sound Level Meters. All SLMs were fitted with ½-inch pre-polarized condenser microphones and windscreens and were calibrated with a Larson Davis Model CA250 precision acoustic calibrator prior to and following the measurement survey. The internal clocks of the sound level meters were set to less than one second of each other to ensure both identical sound level response and simultaneous operation.

The first long-term noise monitor at location LT-1 was positioned 12 feet above the existing grade on a utility pole on the west side of Melvin Road at approximately 20 feet from the centerline of this roadway and 620 feet from the centerline of the southbound lanes of Hwy 29. Noise levels measured at this site resulted from intermittent vehicular traffic on Melvin Road and distant but more constant traffic on Hwy 29. The measured noise levels at this location, including the energy equivalent noise level (L_{eq}), maximum (L_{max}), minimum (L_{min}), and the noise levels exceeded 1, 10, 50 and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} and L_{90}) are shown in Chart 1.

Chart 1: Measured Noise Levels at LT-1



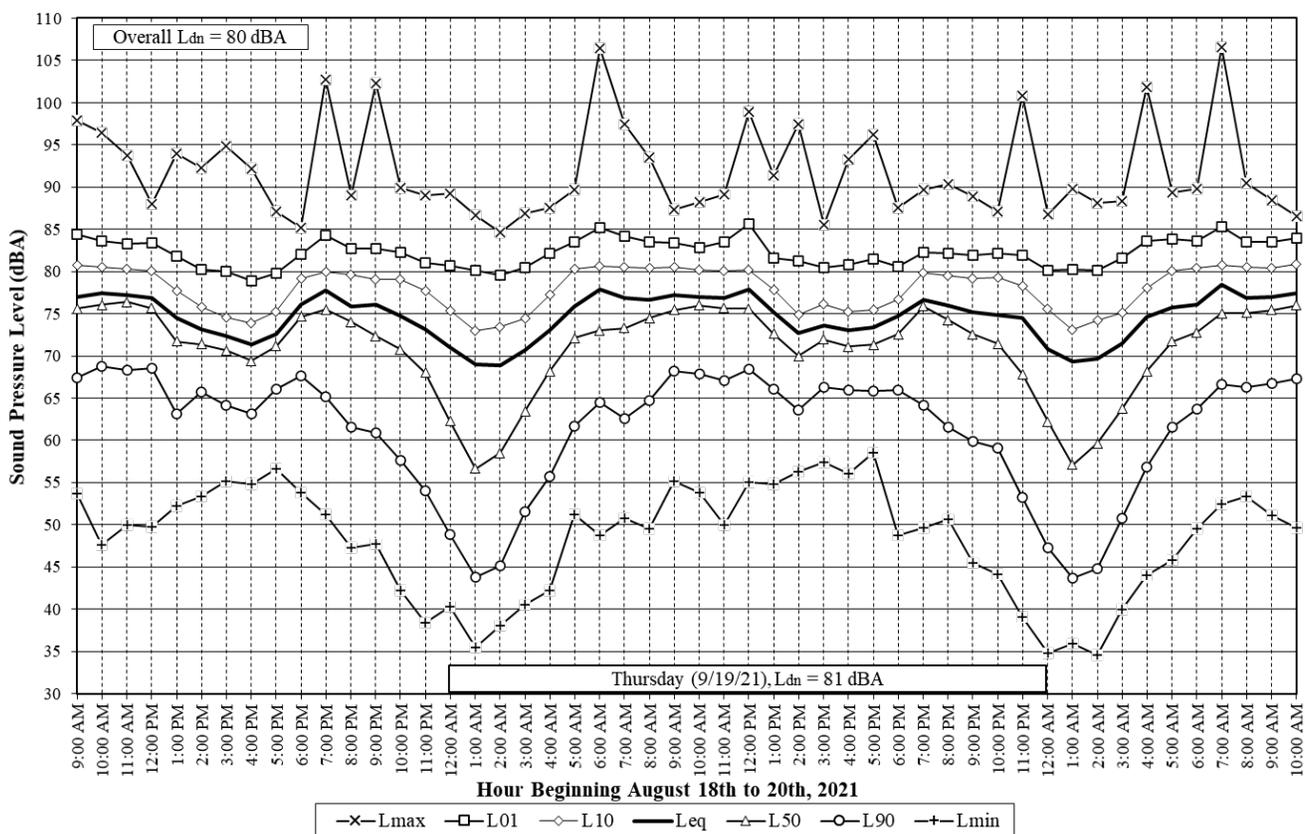
A review of the data indicates that the noise levels at site LT-1 during the 50-hour measurement period followed a diurnal pattern characteristic of traffic noise, with average daytime noise levels ranging from 56 to 67 dBA L_{eq} and average nighttime hourly noise levels ranging from 44 to 60 dBA L_{eq} . The calculated average Day/Night Noise level for the full 50-hour measurement period was 63 dBA, with full day (24-hour) level on 8/19/2021 of 64 dBA L_{dn} .

The second long-term noise monitor at location LT-2 was positioned 12 feet above the existing grade on a utility pole on the west side of Hwy 29, 40 feet from the centerline of the southbound lanes of the highway. Noise levels measured at this location were primarily produced by traffic on Hwy 29. The measured noise levels at this location, including the energy equivalent noise level (L_{eq}), maximum (L_{max}), minimum (L_{min}), and the noise levels exceeded 1, 10, 50 and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} and L_{90}) are shown in Chart 2.

A review of the data indicates that the noise levels at site LT-1 during the 50-hour measurement period followed a diurnal pattern characteristic of traffic noise, with average daytime noise levels ranging from 71 to 78 dBA L_{eq} and average nighttime hourly noise levels ranging from 69 to 78

dBA L_{eq} . The calculated average Day/Night Noise level for the full 50-hour measurement period was 80 dBA, with full day (24-hour) level on 8/19/2021 of 81 dBA L_{dn} .

Chart 2: Measured Noise Levels at LT-2



Based on the results of the long-term measurements and the measured reduction in environmental noise levels with distance from Hwy 29, we have calculated the existing 65, 70, 75 and 80 dBA L_{dn} in areas with a clear line of sight to traffic on Hwy 29 to, respectively, be 460, 200, 80, and 30 feet from the edge of the southbound travel lanes of the highway.

FUTURE NOISE ENVIRONMENT

The predominant noise source affecting the project site is expected to continue to be traffic on Hwy 29. An increase in traffic volumes on this roadway would correlate to an increase in noise levels at the project site. Assuming an annual growth rate of between 2% per year, traffic noise levels in the area would be expected to increase by about 1 dBA in the next 10 years. Thus, the future 65, 70, 75 and 80 dBA L_{dn} in areas with a clear line of sight to traffic on Hwy 29 to, respectively, be 540, 240, 100, and 40 feet from the edge of the southbound travel lanes of the highway. The location of these future L_{dn} noise contours in relation to the project site plan and without regard to noise shielding provided by the project structures are shown in Figure 3, following. It should be noted that noise levels in areas of the site where the project structures would fully, or partially, shield views of Hwy 29 traffic would be lower.

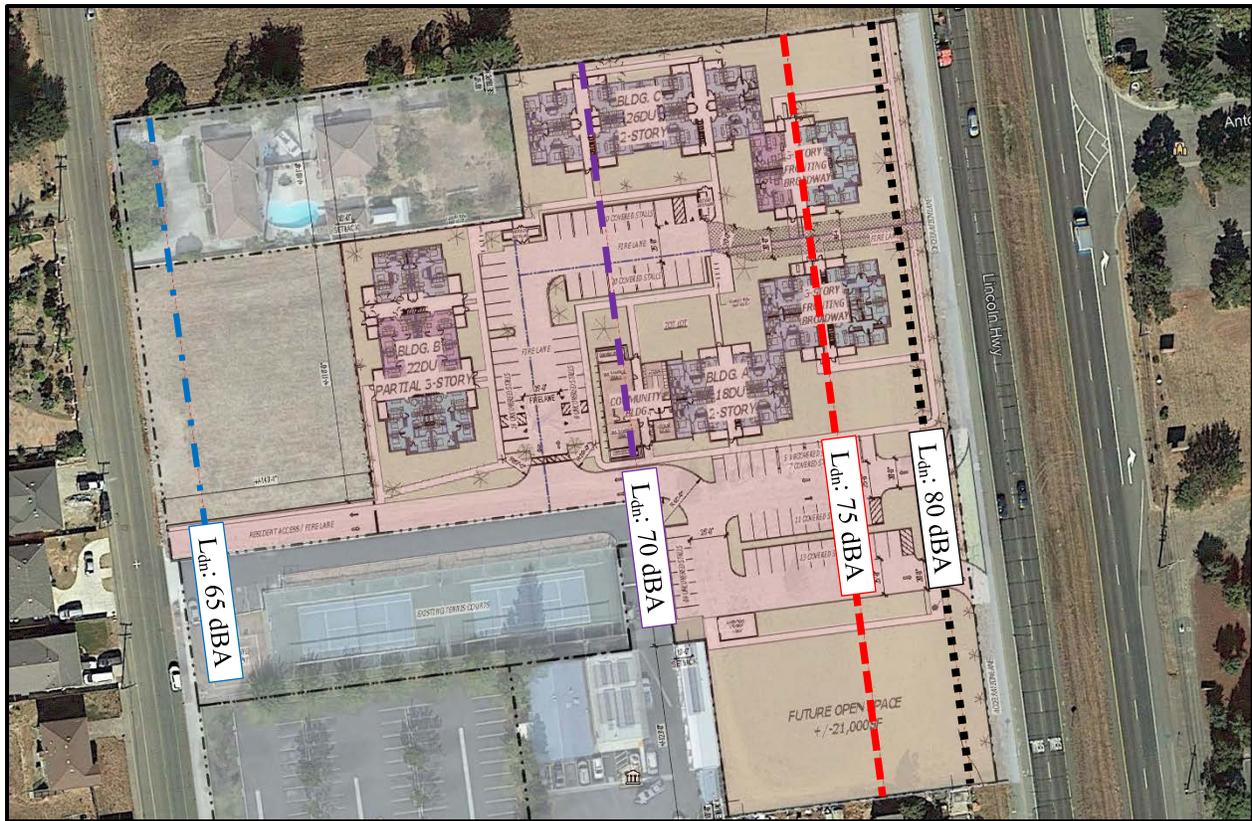


Figure 3: Project Plan with projected future (unobstructed) Hwy 29 Traffic Noise Contours

GENERAL PLAN AND HUD CONSISTENCY ANALYSIS

The impacts of site constraints such as the exposure of the proposed project to excessive levels of noise and vibration are not considered under CEQA. Therefore, this section addresses Noise and Land Use Compatibility for consistency with the policies set forth in the City’s General Plan and HUD Guidelines.

Noise and Land Use Compatibility

Applicable policies were presented in detail in the Regulatory Background section and are summarized below for the proposed project:

- The California Building Code requires interior noise levels in residences attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn} in any habitable room.
- The American Canyon General establishes that where the exterior noise levels are greater than 60 dBA L_{dn} at residential land uses that the design of the project include measures to limit interior noise levels in habitable rooms to a L_{dn} of 45 dBA with doors and windows closed.
- HUD environmental noise regulations consider environmental noise levels of 65 dBA L_{dn} or less acceptable at common outdoor use areas and set an interior noise goal of 45 dBA L_{dn} or less. Additionally, where exterior noise levels range from 65 to 70 dBA L_{dn} , HUD requires that the project provide a minimum of 25 decibels of attenuation, where exterior noise levels range from 70 to 75 dBA L_{dn} a minimum of 30 decibels is required and where exterior noise levels range from 75 to 80 dBA L_{dn} a minimum of 35 decibels of attenuation is required.

The HUD Guidelines also state that the noise exposure at least 10 years in the future must be considered in addition to the existing noise exposure. Though a traffic study was not reviewed for the proposed project, Cal Trans traffic census numbers for Hwy 29 in the site vicinity for the last pre-pandemic year (2019)¹ were considered with a conservative annual growth rate of highway of 2% per year applied to determine the expected Hwy 29 traffic conditions in the year 2031. The 2019 traffic census data with a 2%/year increment for ensuing the years to 2031 were input into the HUD DNL Calculator², to determine the L_{dn} levels at the site under future conditions as required by HUD. The results of these calculations at the project facades and common outdoor use areas nearest Hwy 29 are discussed below and shown in Appendix A.

Future Exterior Noise Environment Outdoor Residential Uses

The project includes a common open space at patios attached to the north and south sides of the Community Building and a ground level “Tot Lot” play area north of the Community Building which appear to be intended to be used as the residential outdoor use area at the project.

Without consideration of intervening building shielding, the HUD DNL Calculator predicted the future exterior noise levels at the “Tot Lot” outdoor use area to 71 dBA L_{dn} and the common open space patios attached to the north and south sides of the Community Building to be exposed to an L_{dn} of 70 dBA. When the expected attenuation from the intervening residential buildings are considered in these areas, we would expect the outdoor noise levels in the “Tot Lot” area and the common open space patio on the north side of the Community Building to be exposed to outdoor noise levels of less than 65 dBA, however the common open space patio on the south side of the Community Building, which would only be shielded from about 50% of the highway traffic noise (fully shielded to the north and fully exposed to the south), would be expected to be exposed to an L_{dn} of 67 dBA.

Considering these findings, only the future exterior noise levels the common open space patio on the south side of the Community Building would exceed the 65 dBA L_{dn} or less HUD acceptability guidelines. To allow sound levels at the southern community room common patio to meet the HUD acceptability guidelines, we recommend that a solid noise barrier wall with a height of 5 feet above patio grade be built on the southern and eastern sides of the patio. To be effective as a barrier to noise, the noise barrier walls should be built without cracks or gaps in the face or large or continuous gaps at the base or where they adjoin the homes or each other. The walls should also have a minimum surface weight of 3.0 lbs. per sq. ft. Small, dispersed, gaps in the base of the walls for landscape irrigation or drainage which do not compose more than 0.5% of the wall area are acceptable.

Future Interior Noise Environment

The HUD DNL Calculator predicted the future exterior noise levels at the easternmost three-story facades of Buildings A and C, which would contain the closest residential facades to Hwy 29 would be exposed to an L_{dn} of 78 dBA, while the easternmost two-story facades of Buildings A and C would be exposed to respective noise levels of 74 dBA and 73 dBA L_{dn}. The HUD calculator results also indicate that the central easternmost façade of Building B which contains residential units that would have clear views of Hwy 29, would be exposed to future highway traffic noise levels of 68 dBA L_{dn}.

1 Go to <https://dot.ca.gov/programs/traffic-operations/census> for this traffic information. During the COVID-19 pandemic traffic volumes on roadways were reduced due to lack of travel, therefore 2019, prior to the pandemic is considered a “normal” traffic year.

2 Found at <https://www.hudexchange.info/environmental-review/dnl-calculator/>. It should also be noted that the DNL and L_{dn} noise metrics are mathematically the same and both refer to the Day/Night Noise Level (see Table 1).

Proposed Residential Uses

The City of American Canyon, the State of California and the HUD guidelines require that interior noise levels within residential uses due to exterior noise sources be maintained at 45 dBA L_{dn} or less. As discussed above residences in the residential facades closest to Hwy 29 would be exposed to levels of 78 dBA L_{dn} under expected future conditions. Other residential units at the project will be farther removed from Hwy 29 and will thus be exposed to lower traffic noise levels.

Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. With windows closed standard construction provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA L_{dn} , the inclusion of adequate forced-air mechanical ventilation is often the method selected to reduce interior noise levels to acceptable levels by closing the windows to control noise. Where noise levels exceed 65 dBA L_{dn} , forced-air mechanical ventilation systems and sound-rated construction methods are normally required. Such methods or materials may include a combination of smaller window and door sizes as a percentage of the total building façade facing the noise source, sound-rated windows and doors, sound rated exterior wall assemblies, and mechanical ventilation so windows may be kept closed at the occupant's discretion.

Future noise levels at the project site would require that residential units be designed to control interior noise levels to 45 dBA L_{dn} or less. Therefore, following HUD guidelines, the proposed project must provide a minimum of 35 dBA of attenuation in the 75 to 78 dBA L_{dn} zone, which would include all residential facades within 140 feet of the Hwy 29 centerline, a minimum of 30 dBA of attenuation is required in the 70 to 75 dBA L_{dn} zone, which would include all residential facades within 140 and 275 feet of the Hwy 29 centerline with a view of highway traffic, and a minimum of 25 dBA of attenuation is required in the 65 to 70 dBA L_{dn} zone, which would include all residential facades between 275 and 580 feet of the Hwy 29 centerline with a view of highway traffic. The locations of these Noise reduction zones are shown in Figure 4.

Preliminary calculations were made to quantify the transmission loss provided by building elements in order to estimate interior noise levels resulting from exterior noise sources. Site plans prepared by HED Architects were reviewed, and while these plans did not show any exterior fenestration, between 10 and 50% window and exterior door area to exterior wall area was considered for bedrooms and living areas of the residential units. Based on typical California construction, the exterior walls of the residential units were assumed to be framed with 2x4 or 2x6 wood stud wall with cavity insulation, a single layer of gypsum board attached to the inside of the studs. Additionally, based on a review project renderings the exterior finish materials are expected to be either 7/8" cement plaster (stucco), brick veneer, or cement fiber board. Considering the exterior finishes and wall assemblies, the sound isolation ratings of the exterior walls would be 46-STC for stucco³, 56-STC for brick veneer⁴, and 40-STC for fiber cement⁵ finishes. A summary of the inputs to HUD Figure 19 used to complete the calculations of interior noise levels with 20% and 30% window/door areas for each of these exterior wall finishes at the façade of the 3-story portion of Building A, which would be closest to Hwy 29, and thus would have the worst-case noise exposure, is provided in Appendix B.

3 Based on laboratory test number W-50-71 published by the U.S. National Bureau of Standards.

4 Based on laboratory test number W-44-71 published by the U.S. National Bureau of Standards.

5 Based on laboratory test TL35A; James Hardie Building Products Sound Isolation Technical Bulletin 07272007

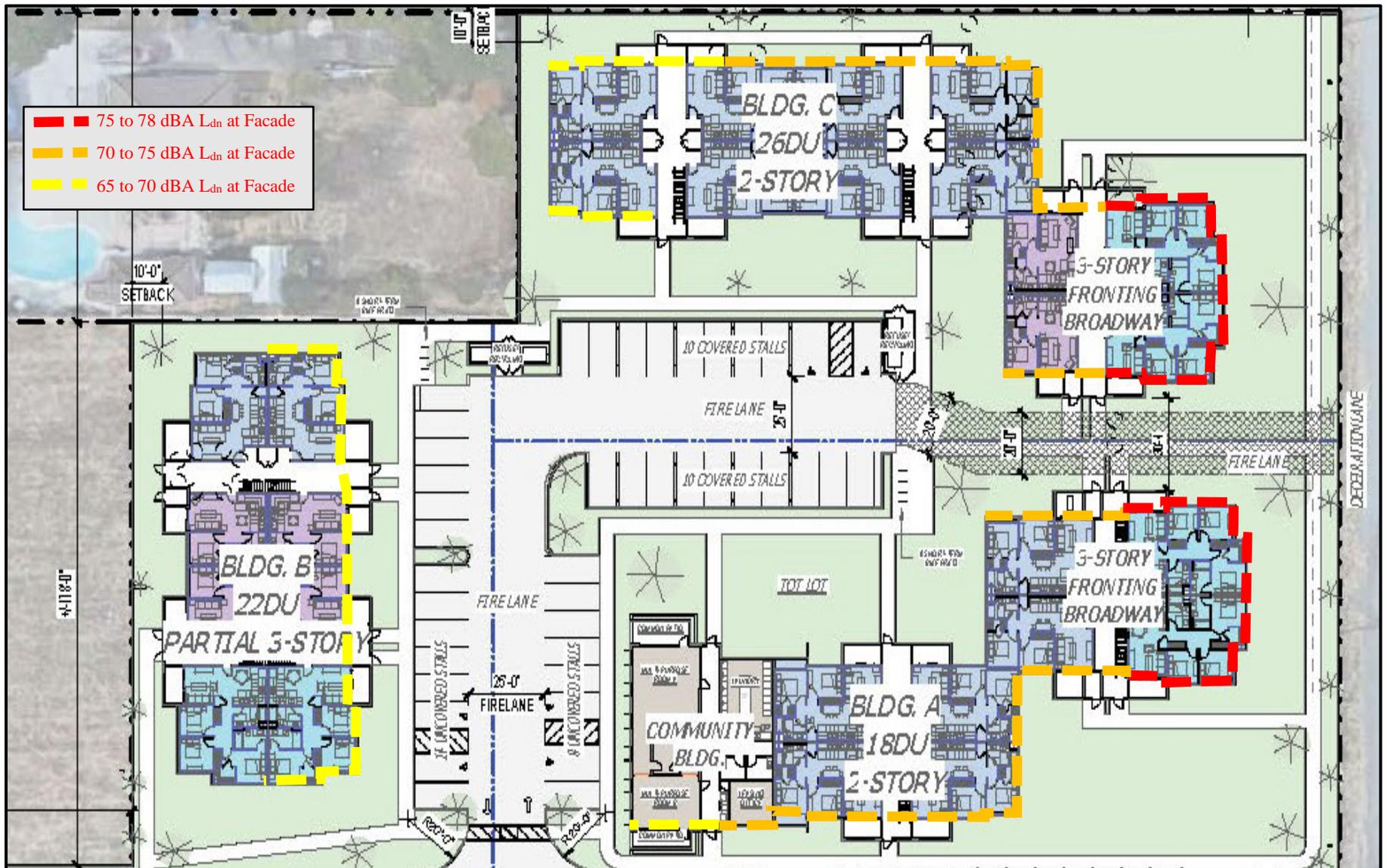


Figure 3: Site Plan with Façade L_{dn} Zone

Table 4: STC ratings by Noise Exposure, Exterior Finish, & Percent of Wall Area

Exterior finish and exterior to interior sound attenuation rating needed		% Exterior window and/or door area of room				
		10	20	30	40	50
Brick Veneer Exterior	STC rating needed for 25 dBA of attenuation ($L_{dn} = 65$ to 70 dBA)	NR ¹	NR ¹	NR ¹	STC 26	STC 26
	STC rating needed for 30 dBA of attenuation ($L_{dn} = 70$ to 75 dBA)	NR ¹	STC 26	STC 30	STC 31	STC 32
	STC rating needed for 35 dBA of attenuation ($L_{dn} = 75$ to 78 dBA)	STC 30	STC 32	STC 35	STC 36	STC 38
Cement Plaster (Stucco) Exterior	STC rating needed for 25 dBA of attenuation ($L_{dn} = 65$ to 70 dBA)	NR ¹	NR ¹	NR ¹	STC 26	STC 26
	STC rating needed for 30 dBA of attenuation ($L_{dn} = 70$ to 75 dBA)	STC 26	STC 28	STC 30	STC 31	STC 32
	STC rating needed for 35 dBA of attenuation ($L_{dn} = 75$ to 78 dBA)	STC 34	STC 38	STC 40	STC 41	STC 41
Fiber Cement Exterior	STC rating needed for 25 dBA of attenuation ($L_{dn} = 65$ to 70 dBA)	NAR ¹	STC 26	STC 28	STC 30	STC 30
	STC rating needed for 30 dBA of attenuation ($L_{dn} = 70$ to 75 dBA)	NF ²	NF ²	NF ²	NF ²	NF ²
	STC rating needed for 35 dBA of attenuation ($L_{dn} = 75$ to 78 dBA)	NF ²	NF ²	NF ²	NF ²	NF ²

¹ NR = Not Rated: Standard thermal insulating windows and weather sealed doors, which typically achieve minimum STC ratings of 24, will be acceptable for use in these areas.

² NF = Not Feasible: Window STC ratings required to meet the needed attenuation exceed 51 STC.

The results shown in Table 4 indicate that with brick or stucco exterior finishes the sound ratings of these windows and doors could range from non-acoustically rated thermal insulating windows and weather sealed doors with low window/door percent areas to windows and doors with STC 38 to 41 ratings when windows and/or doors make up a high percent of the exterior wall area. Conversely, achieving exterior to interior noise reductions of 30 to 35 dBA at exterior facades with fiber cement finishes has been determined to be unfeasible due to the very high windows and door STC ratings that would be required to compensate for the low STC rating of walls with fiber cement siding.

If fiber cement siding is desired at the project, walls with fiber cement siding in areas requiring exterior to interior noise reductions of 30 to 35 dBA, the exterior walls should be acoustically upgraded with exterior sheathing (plywood or gypsum board) and an additional layer of exterior gypsum board installed beneath the fiber cement and two layers of installed to the units face for the following assembly:

Fiber Cement Exterior wall upgrade: (sheathing under fiber cement & 2 layers of gyp. bd. at int.
 EXTERIOR: Fiber cement siding over 1 layer of exterior gypsum bd. on wood or gypsum sheathing.
 CAVITY: Wood studs with 3 ½” thick sound attenuation blankets in the cavity.
 INTERIOR: 2 layers of 5/8” gypsum board.

This upgraded exterior wall has an estimated laboratory STC rating of 47 and with its use the window and door STC ratings given for the Cement Plaster exterior finishes in Table 6 can be used for the given exterior window and/or door percent areas

Recommended Conditions of Approval

For consistency with the General Plan, the following Conditions of Approval are recommended:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for units throughout the site so that windows can be kept closed to control noise.
- Provide sound rated windows and exterior doors to maintain interior noise levels within residential uses at acceptable levels. Preliminary calculations show that with Stucco or Brick exterior wall finishes sound-rated windows and exterior doors with STC Ratings of 30 to 41 would be needed for worst-case residential units along Hwy 29 (Broadway). These calculations also show that exterior wall finished with fiber cement siding may require acoustical upgrades in addition to sound-rated windows and exterior doors to maintain allowable interior noise levels within residential uses.
- A qualified acoustical specialist shall prepare an analysis of interior residential noise levels resulting from all exterior sources during the final design phase of the project pursuant to requirements set forth in the General Plan and State Building Code. The study will review the final site plan, building elevations, exterior wall types, and floor plans prior to construction and confirm building treatments necessary to reduce interior noise levels to 45 dBA L_{dn} or less within residential units. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City, along with the building plans and approved design, prior to issuance of a building permit.

NOISE IMPACTS AND MITIGATION MEASURES

Significance Criteria

The following criteria were used to evaluate the significance of noise and vibration impacts resulting from the project:

1. **Temporary or Permanent Noise Increases in Excess of Established Standards.** A significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase over ambient noise levels at existing noise-sensitive receptors surrounding the project site and that would exceed applicable noise standards presented in the General Plan or Municipal Code at existing noise-sensitive receptors surrounding the project site.
 - Operational Noise in Excess of Standards. A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code.
 - Permanent Noise Increase. A significant impact would be identified if traffic generated by the project or project improvements/operations would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA L_{dn} or greater where the future noise level is compatible in terms of noise and land use compatibility, or b) the noise level increase is 3 dBA L_{dn} or greater where the future noise level exceeds the compatibility threshold.

2. **Temporary Noise Increase.** A significant temporary noise impact would be identified if project construction produces maximum noise levels greater than 75 dBA between the hours of 7 a.m. and 7 p.m. or 60 dBA between the hours of 7 p.m. and 7 a.m. at the adjacent residential uses as specified in the Municipal Code.
3. **Generation of Excessive Groundborne Vibration.** A significant impact would be identified if the construction of the project would generate excessive vibration levels surrounding receptors. A continuous vibration limit of 0.30 in/sec PPV (peak particle velocity) is used to minimize the potential for cosmetic damage at older residential structures. A continuous vibration limit of 0.50 in/sec PPV is used to minimize the potential for cosmetic damage at buildings of modern residential, commercial, or industrial construction.
4. **Excessive Aircraft Noise.** A significant noise impact would be identified if the project would expose people residing or working in the project area to excessive aircraft noise levels.

Impact 1: Temporary or Permanent Noise Increases in Excess of Established Standards. Project construction could result in a substantial temporary noise increase in the site vicinity. Mechanical equipment operations could result in noise levels exceeding City of Santa Clara Municipal Code standards at the nearest noise-sensitive uses. **This is a potentially significant impact.**

a. On-Site Operational Noise

Section 8.12.070 of the City's Municipal Code establishes noise level performance standards for exterior noise sources of noise, as seen in Table 8.12.070. At the project adjacent single-family residences, hourly average noise levels exceeding 60 dBA L_{50} between the hours of 7:00 a.m. and 10:00 p.m. or 50 dBA L_{eq} between 10:00 p.m. and 7:00 a.m. would constitute a significant noise impact.

The proposed project would include mechanical equipment such as heating, ventilation, and air conditioning systems (HVAC). Project plans currently do not indicate planned locations for HVAC equipment however it is reasonably assumed they may be located on the rooftop of the proposed buildings. Details pertaining to the type, size, and noise specifications of equipment were not available at the time of this study. Other source of noise associated with mixed-use buildings such as parking lot activity and deliveries are not anticipated to generate substantial noise outside of project property lines due to most parking being located away from the property lines.

HVAC equipment typical for buildings of this type and size could generate noise levels of up to 78 dBA at a distance of 3 feet for larger packaged units, and up to 59 dBA at a distance of 3 feet for smaller or low-noise equipment such as individual unit heat pumps, exhaust fans or variable refrigerant flow systems. Based on a review of the current project plans, the roof lines of the proposed project will be approximately 10 feet from the closest residential property lines. Considering this distance and that if used larger rooftop packaged HVAC equipment would be located centrally on rooftops, noise levels from such larger rooftop packaged HVAC equipment could reach 54 dBA L_{50} without consideration of any acoustical shielding from a roof edge parapet wall. Smaller HVAC equipment at the rooftop perimeter max produce noise level of 50 dBA L_{50} without consideration of roof edge acoustical shielding. Because HVAC equipment may operate throughout all hours of the day and night, noise generated by HVAC equipment would have the potential to exceed the nighttime Municipal Code limit of 50 dBA L_{eq} at the adjacent residential uses. This is a **potentially significant impact.**

Mitigation Measure 1a: To reduce noise resulting from HVAC equipment operations, one of the following measures shall be implemented:

- Equipment which would generate substantial noise shall be located at a minimum distance of 90 feet from the nearest residential property lines.
- A careful selection of equipment shall be conducted and approved by a qualified acoustical professional such that equipment does not generate noise which would exceed Municipal Code standards at adjacent property lines.
- Equipment may be shielded by walls, such as by a parapet wall constructed along the proposed building's roof line, such that the adjacent lower height residential uses are not directly exposed to mechanical equipment noise. To provide adequate noise reduction, walls would have to be constructed to fully block the line of sight between the equipment and the adjacent property line and should have a minimum surface weight of 3 pounds per square foot.

Implementation of any of the above measures would limit the noise exposure resulting from mechanical equipment operations to a **less-than-significant** level.

b. Permanent Noise Increases from Project Traffic

Neither the City of American Canyon nor the State of California define the traffic noise level increase that is considered substantial. A significant impact would occur if the permanent noise level increase due to project-generated traffic was 3 dBA L_{dn} or greater at noise-sensitive receptors for existing levels exceeding 55 dBA L_{dn} or was 5 dBA L_{dn} or greater for existing levels at or below 55 dBA L_{dn} . For reference, a 3 dBA L_{dn} noise increase would be expected if the project would double existing traffic volumes along a roadway and a 5 dBA L_{dn} noise increase would be expected if the project would triple existing traffic volumes along a roadway.

Considering that the main resident access will be via Hwy 29 and given the size of the proposed project and the current and future traffic volumes on Hwy 29, traffic generated by the project does not have the potential to generate traffic resulting in a doubling of existing traffic volumes on Hwy 29. This is a **less-than-significant impact**.

Mitigation Measure 1b: None required.

c. Temporary Noise Increases from Project Construction

Section 8.12.080.B.2.a of the City's Municipal Code prohibits the operation of any tools or equipment used in construction between the hours of 7 p.m. and 7 a.m., that creates a noise disturbance across a residential property line, except by variance and Section 8.12.080.B.2.b of the Municipal Code requires that, where technically and economically feasible, construction activities be conducted in such a manner that the maximum noise levels at affected single-family properties not exceed noise levels greater than 75 dBA between the hours of 7 a.m. and 7 p.m. or 60 dBA between the hours of 7 p.m. and 7 a.m.

Construction of the proposed project would involve site preparation, grading and excavation, trenching, building erection, interior/architectural coating, and paving. Table 5 shows the anticipated construction noise levels calculated for each phase of construction using National Cooperative Highway Research Program noise data implemented in the Federal Highway Administration (FHWA) Roadway Construction Noise Model 2 (RCNM2). Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor.

TABLE 5 Calculated Construction Noise Levels for Each Phase of Construction

Construction Phase	At Distance of 50 ft.	
	L _{eq} , dBA	L _{max} , dBA
Site Preparation	81	88
Grading/Excavation	82	89
Trenching/Foundation	79	88
Building – Exterior	80	85
Building – Interior/Architectural Coating	66	67
Paving	85	88

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. As indicated in Table 5, at 50 feet from the noise source, maximum instantaneous noise levels generated by project construction equipment are calculated to range from 67 to 89 dBA L_{max} and hourly average noise levels are calculated to range from 66 to 85 dBA L_{eq}.

The project site is currently undeveloped with existing single-family uses on the northwestern property line, a park on the southern property line, single family homes to the west across Melvin Road and commercial, religious and hotel/lodging uses to the east opposite Hwy 29.

Anticipated construction noise levels were calculated to reach 58 to 82 dBA L_{eq} and 59 to 86 dBA L_{max} at the nearest single-family outdoor use to the northwest located approximately 125 feet from the center and 70 feet from the perimeter of construction activity. Noise levels at surrounding uses would vary as construction activity is concentrated at different points throughout the site.

Implementation of the following construction best management practices would regulate the hours of construction, reduce construction noise levels emanating from the site, and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

Construction Best Management Practices

Develop a construction noise control plan, including, but not limited to, the following technically and economically feasible controls:

- Construction activities shall be limited to hours between 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or Holidays.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- If geotechnical conditions allow, drilled piles should be used in place of impact or vibratory pile driving. Drilled piles would generate substantially less noise than impact-drive pile driving.
- Unnecessary idling of internal combustion engines should be strictly prohibited.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Control noise from construction workers' radios to a point where they are not audible at existing residential uses to the north of the project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Implementation of the above measures would reduce this impact to a **less-than-significant** level.

Mitigation Measure 1c: None required.

Impact 2: Exposure to Excessive Groundborne Vibration due to Construction.
 Construction-related vibration levels are expected to potentially exceed applicable vibration thresholds at a nearby sensitive land use. **This is a potentially significant impact.**

The City of American Canyon does not specify a construction vibration limit. For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some old buildings (see Table 3). There do not appear to be any vibration-sensitive historic structures in the site vicinity. The 0.3 in/sec PPV vibration limit would be applicable to residential structures adjoining the site to the north and located across Buckingham Drive to the west. The 0.5 in/sec PPV vibration limit would be applicable to other structures in the vicinity of the project site.

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include site preparation, grading and excavation, trenching, building (exterior), interior/architectural coating, and paving. Considering the height and type of structures proposed, pile driving, which can cause excessive levels of vibration, is not anticipated as a method of construction. Other project construction activities, such as the use of jackhammers, rock drills, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) also have the potential to generate substantial vibration in the immediate vicinity. Erection of the building

structure is not anticipated to be a source of substantial vibration with the exception of sporadic events such as dropping of heavy objects, which should be avoided to the extent possible.

The closest structures to the project site are residential structures located as close as 45 feet north of site edge. Other nearby structures include residential structures at a distance of approximately 210 feet to the west, park structures at a distance of approximately 75 feet to the southwest, and commercial structures at a distance of approximately 275 feet to the east. Table 6 presents typical vibration levels that could be expected from construction equipment at a reference distance of 25 feet and calculated levels at distances representative of the adjacent residential and commercial buildings using a Rayleigh (surface) wave propagation model⁶ using factors for ground and average building damping ratios^{3,7}.

TABLE 6 Vibration Source Levels for Construction Equipment (in/sec PPV)

Equipment	Reference Distance, 25 ft	Residential (north), 45 ft	Residential (west), 210 ft	Park (south), 75 feet	Commercial (east), 275 feet
Clam shovel drop	0.202	0.08	0.008	0.04	0.006
Hydromill (slurry wall)	in soil	0.008	0.003	0.0003	0.002
	in rock	0.017	0.007	0.001	0.003
Vibratory Roller	0.210	0.09	0.009	0.04	0.006
Hoe Ram	0.089	0.04	0.004	0.017	0.002
Large bulldozer	0.089	0.04	0.004	0.017	0.002
Caisson drilling	0.089	0.04	0.004	0.017	0.002
Loaded trucks	0.076	0.03	0.003	0.015	0.002
Jackhammer	0.035	0.014	0.001	0.007	0.001
Small bulldozer	0.003	0.004	0.0001	0.001	0.0001

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, October 2018

The calculated levels in Table 6 at the adjacent residential and commercial buildings indicate that California Department of Transportation guidelines would not be exceeded at these structures during construction. This is a less than a **less-than-significant impact**.

Mitigation Measure 1c: None required

Impact 3: Excessive Aircraft Noise Levels. The project site is located more than two miles from a public airport or public use airport and would not expose people residing or working in the project area to excessive aircraft noise levels. **This is a less-than-significant impact.**

Napa County Airport is a public-use airport located approximately 2.5 miles north of the project site. The project site lies outside of the 60 dBA CNEL noise contour of the airport, according to the Napa County Airport Noise Contour Map shown in Figure 11-5 of the City General Plan. This means that future exterior noise levels due to aircraft from the Napa County Airport would not exceed 60 dBA CNEL/L_{dn}. Therefore, the proposed project would be compatible with the City’s exterior noise standards for aircraft noise. This would be a less-than-significant impact.

Mitigation Measure 3: None required.

⁶ Amick, H., and Gendreau, M., “Construction Vibrations and Their Impact on Vibration Sensitive Facilities”, Presented at the ASCE Construction Congress 6, Orlando, Florida, February 22, 2000.

⁷ H. Bachmann, et al., Vibration Problems in Structures, Birkhauser Verlag, Berlin, 1995.

APPENDIX A: HUD DNL CALCULATOR RESULTS

DNL Calculator

Site ID	Bldg. A: Three Story Closest to Hwy. 29
Record Date	09/17/2021 <input type="text" value=""/>
User's Name	Illingworth & Rodkin, Inc.

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
-----------------------	--

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	80	80	80
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	74	68	76
Calculate Road #1 DNL	78	<input type="button" value="Reset"/>	

DNL Calculator

Site ID	Bldg. A: Two Story Closest to Hwy. 29	
Record Date	09/17/2021	
User's Name	Illingworth & Rodkin, Inc.	

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
-----------------------	--

Road #1			
Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	155	155	155
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	69	64	71
Calculate Road #1 DNL	74	Reset	

DNL Calculator

Site ID	Bldg. C: Three Story Closest to Hwy. 29
Record Date	09/17/2021 
User's Name	Illingworth & Rodkin, Inc.

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
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Road #1			
Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	85	85	85
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	73	68	75
Calculate Road #1 DNL	78	Reset	

DNL Calculator

Site ID	Bldg. C: Two Story Closest to Hwy. 29
Record Date	09/17/2021 
User's Name	Illingworth & Rodkin, Inc.

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
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Road #1	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	168	168	168
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	69	64	71
Calculate Road #1 DNL	73	Reset	

DNL Calculator

Site ID	Bldg. B: Closest to Hwy. 29	
Record Date	09/17/2021	
User's Name	Illingworth & Rodkin, Inc.	

Road # 1 Name: Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	370	370	370
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	64	58	66
Calculate Road #1 DNL	68	Reset	

DNL Calculator

Site ID	Center of Tot Lot (without building shielding)	
Record Date	09/17/2021	
User's Name	Illingworth & Rodkin, Inc.	

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
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Road #1			
Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	226	226	226
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	67	62	69
Calculate Road #1 DNL	71	Reset	

DNL Calculator

Site ID	Community Bldg. Common Patios (without building shielding)	
Record Date	09/17/2021	
User's Name	Illingworth & Rodkin, Inc.	

Road # 1 Name:	Hwy 29 Acoustic Center(2019 traffic projected to 2031 w/ 2%/year increase)
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Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	270	270	270
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	54825	1700	2385
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	66	61	68
Calculate Road #1 DNL	70	Reset	

APPENDIX B: HUD FIGURE 19

Figure 19
Description of Noise Attenuation Measures
(Acoustical Construction)

Part I

Project Name: Napa Cove – Residential Room with 20% of Brick Veneer sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **ACHIEVED**
Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Brick Veneer, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 56
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 32
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 32
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 39 (resulting exterior to interior Attenuation = 37 dBA)
2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Brick Veneer, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 56
 - c. Description of windows: STC 32
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 32
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 39 (resulting exterior to interior Attenuation = 37 dBA)
3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A
4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Part I

Project Name: Napa Cove – Residential Room with 30% of Brick Veneer sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **ACHIEVED**

Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Brick Veneer, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 56
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 35
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 35
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 40 (resulting exterior to interior Attenuation = 36 dBA)

2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Brick Veneer, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 56
 - c. Description of windows: STC 35
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 35
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 40 (resulting exterior to interior Attenuation = 36 dBA)

3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large-uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Part I

Project Name: Napa Cove – Residential Room with 20% of Stucco sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **ACHIEVED**

Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 38
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 38
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 42 (resulting exterior to interior Attenuation = 36 dBA)
2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: STC 38
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 38
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 42 (resulting exterior to interior Attenuation = 36 dBA)
3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large-uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A
4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Part I

Project Name: Napa Cove – Residential Room with 30% of Stucco sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **ACHIEVED**

Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 40
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 40
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 43 (resulting exterior to interior Attenuation = 36 dBA)

2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: STC 40
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 40
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 43 (resulting exterior to interior Attenuation = 36 dBA)

3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large-uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Part I

Project Name: Napa Cove – Residential Room with 20% of Fiber Cement sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **NOT ACHIEVED**
Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Fiber Cement siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 40
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 51
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 51
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 41 (resulting exterior to interior Attenuation = 30 dBA)

2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Fiber Cement siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 40
 - c. Description of windows: STC 51
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 51
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 20%
 - h. Combined STC rating for wall component: 41 (resulting exterior to interior Attenuation = 30 dBA)

3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large-uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Part I

Project Name: Napa Cove – Residential Room with 30% of Fiber Cement sided exterior wall occupied by windows an/or doors (Worst-Case Traffic Noise Exposure)

Location: American Canyon, California

Sponsor/Developer: CRP Affordable Housing & Community Development

Noise Level (From NAG): 78 dBA DNL Attenuation Required: 35 dBA **NOT ACHIEVED**

Primary Noise Source(s): Highway 29 (Broadway)

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: Fiber Cement siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 40
 - c. Description of windows: N/A
 - d. STC rating for window type: STC 51
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 51
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 41 (resulting exterior to interior Attenuation = 31 dBA)

2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: Fiber Cement siding, insulated wood stud, and gypsum board interior
 - b. STC rating for wall (rated for no windows or doors): STC 40
 - c. Description of windows: STC 51
 - d. STC rating for window type:
 - e. Description of doors: N/A
 - f. STC rating for doors: STC 51
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows/doors: 30%
 - h. Combined STC rating for wall component: 41 (resulting exterior to interior Attenuation = 31 dBA)

3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large-uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced-air mechanical ventilation system.

Prepared by:
Fred M. Svinth
Senior Consultant
Date: September 20, 2021

Appendix M – Traffic Study



September 21, 2021

Mr. Shady Fayed
 CRP Affordable Housing & Community Development
 4455 Morena Blvd Suite #107
 San Diego, CA 92117

DRAFT Traffic Study for the Napa Cove Project

Dear Mr. Fayed;

W-Trans has completed an evaluation of access and egress issues associated with the Napa Cove residential development to be located on State Route (SR) 29 in the City of American Canyon. We understand that the project as proposed includes 66 apartments in two and three-story buildings. The issues addressed include the project’s trip generation and resulting need for access improvements to serve the volume of traffic anticipated.

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 “Multifamily Housing (Low-Rise)” (ITE LU 220) for the units in two-story buildings and “Multifamily Housing (Mid-Rise)” (ITE LU 221) for the units in three-story buildings. Because the site is currently unoccupied, there are no existing trips to be deducted.

The expected trip generation potential for the proposed project is indicated in Table 1. The proposed project is expected to generate an average of 427 trips per day, including 28 trips during the a.m. peak hour and 33 during the p.m. peak hour; these new trips represent the increase in traffic associated with the project compared to existing volumes.

Table 1 – Trip Generation Summary											
Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Multifamily Housing (Low-Rise)	36 du	7.32	264	0.46	17	4	13	0.56	20	13	7
Multifamily Housing (Mid-Rise)	30 du	5.44	163	0.36	11	3	8	0.44	13	8	5
Total	66		427		28	7	21		33	21	12

Note: du = dwelling unit

Access Analysis

Right-Turn Lane Warrants

The need for a right-turn lane or taper was evaluated based on criteria contained in the *Intersection Channelization Design Guide*, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985. A right-turn lane would consist of a lane installed to the right of the travel lane and would be a minimum of ten feet wide, plus a shoulder where not adjacent to a curb. A right-turn taper is a shoulder area that gets progressively wider as the motorist drives toward the intersection. Both improvements are meant to provide an area for motorists turning right to move out of the traffic lane without impeding through traffic. The warrants were evaluated using existing volumes with both the a.m. and p.m. project volumes.

Based on the criteria applied, the warrants were evaluated using the peak hour volumes published by Caltrans, and both the a.m. and p.m. peak hour inbound trips. Based on these assumptions, a right-turn taper is warranted. A copy of the spreadsheets indicating these results is enclosed.

Right-turn Lane Design Requirements

The design requirements for the right-turn deceleration lane on SR 29 were based on design criteria provided by Caltrans in the *Highway Design Manual* and the American Association of State Highway and Transportation Officials (AASHTO) in *A Policy on Geometric Design on Highways and Streets*. The design of the lane consists of two components, the storage portion of the lane and the taper, which transitions the road width from the outside of the through lane to the outside of the right-turn lane.

- **Storage Needs** – The access will essentially have no queuing in the right-turn lane because the right turn into the site has no opposing movements.
- **Deceleration** – Guidance for deceleration lengths provided in the Caltrans *Highway Design Manual* indicates a recommended deceleration distance for 55 mph of 485 feet, though it further notes in Section 405.3(2)c, Deceleration Lane Length that, “Where partial deceleration is permitted on the through lane because of limited right-of-way or other constraints, average running speeds in Table 405.2B may be reduced 10 to 20 mph for a lower entry speed.” If a lower speed differential of 35 mph is used the deceleration plus storage length is 275 feet.
- **Acceleration** – The Caltrans Highway Design manual states acceleration lanes should be provided for difficult turning movements due to radius or limited visibility.

It is appropriate to assume some deceleration will occur in the through travel lane, especially during peak periods when congestion limits travel speeds to less than the 55-mph speed limit. The deceleration parameters suggested include a taper based on an initial speed of 45 mph, decelerating through 60 feet of taper length, with final deceleration to 10 mph in the right-turn lane. A turn pocket length of 125 feet is needed in order to provide the total 275 feet to decelerate from 45 mph to 10 mph, the lowest speed applied since right-turning traffic would not have to stop to make a free right-turn movement.

In reviewing the need for an acceleration lane, it is noted that visibility is adequate, and it is not a difficult turning movement. Given that there is not a demonstrated need for an acceleration lane, one is not required though a short acceleration lane would appear to be acceptable.

Site Access

The project as designed would have two driveways, with one for egress and one for ingress; both are limited to right turns only. From an operational standpoint, as both driveways are free right turns, there is limited delay, and a secondary access point would not be necessary to achieve acceptable operation. It is further noted that while the driveways are limited to ingress or egress for normal operation, in the event of an emergency, responding vehicles could access the site through the egress or leave the site through the ingress driveway by driving across a landscaped area after verifying the absence of any oncoming traffic. Based on this review, additional access points do not appear to be necessary.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Allison C. Jaromin, EIT
Associate Engineer

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/acj/ACA037.L1

Appendix N – Preliminary Sanitary Sewer Flow Generation Calculations



September 23, 2021

Job No.: 3506-000

**PRELIMINARY SANITARY SEWER FLOW GENERATION CALCULATIONS
NAPA COVE
AMERICAN CANYON, CALIFORNIA**

PARCEL	LAND USE	Dwelling Units (Note 1)	Occupant Density (People/Unit) (Note 2)	Average Unit Flow Factor (GPD) (Note 3)	Inch-Diameter-Miles of Pipe	DESIGN STANDARDS		
						PEAK FLOW (GPD) (Note 4)	I & I (GPD) (Note 5)	DESIGN FLOW (GPD)
1	High Density Residential (RH)	66	2.5	150	0.4	74,250	1,600	75,850
Total Combined Sewer Flows						74,250	1,600	75,850

Notes:

1. Unit Count per Site Plan submittal dated August 2020.
2. Multi-family Density Rate: 2.5 people/unit per City (Greg Baer) email on 05/10/2012.
3. Unit Flow factor of 150 GPD/person per City Specifications, Section 5.23.
4. Peak Flow is determined by multiplying average flow by a factor of three (3) per City Specifications, Section 5.23.
5. I/I Flow factor of 4,000 gallons per inch-diameter-mile per day, per City Specifications, Section 5.23.

Appendix O – Water Demand Calculations



**WATER DEMAND
NAPA COVE
AMERICAN CANYON, CALIFORNIA**

September 23, 2021
Job No: 3506-000

	Zoning	Land Use	Dwellin g Units	Acres	Demand Factor	Average Day Demand (gpd)	Max Day Factor	Max Day Demand (gpd)	Peak Hour Factor	Peak Hour Demand (gpm)
Proposed	High Denisty Residential (RH)	Multi-Family Residential	66	3.5	160	10,560	2.0	21,120	1.75	26

Notes:

1. Demand and Peaking Factors per City of American Canyon - Potable Water Master Plan Tables 7 & 12

Napa Cove Location Map



**Proposed Napa Cove
Rents by Bedroom Size and AMI**

PROPOSED RENTS								
Unit Type	Unit Size (SF)	Number of Units	Asking Rent	Utility Allowance (1)	Gross Rent	2021 LIHTC Maximum Allowable Gross Rent	2021 HUD Fair Market Rents	
<i>@30%</i>								
1BR / 1BA	614	2	\$589	\$50	\$639	\$639	\$1,531	
2BR / 1BA	860	7	\$697	\$71	\$768	\$768	\$2,018	
3BR / 2BA	1,111	4	\$794	\$92	\$886	\$886	\$2,826	
<i>@40%</i>								
1BR / 1BA	614	2	\$803	\$50	\$853	\$853	\$1,531	
2BR / 1BA	860	7	\$953	\$71	\$1,024	\$1,024	\$2,018	
3BR / 2BA	1,111	4	\$1,090	\$92	\$1,182	\$1,182	\$2,826	
<i>@60%</i>								
1BR / 1BA	614	12	\$1,229	\$50	\$1,279	\$1,279	\$1,531	
2BR / 1BA	860	18	\$1,465	\$71	\$1,536	\$1,536	\$2,018	
3BR / 2BA	1,111	9	\$1,681	\$92	\$1,773	\$1,773	\$2,826	
<i>Non-Rental</i>								
3BR / 2BA	1,111	1	N/A	N/A	N/A	N/A	\$2,826	
		66						

Notes (1) Source of Utility Allowance provided by the Developer based on the Utility Allowance Schedule from the Housing Authority of the City of Napa, effective November 2020.

December 2, 2021

Brent Cooper
American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Napa Cove Development Review

Dear Mr. Cooper,

Thank you for sharing the Napa Cove affordable apartment site plan at 3805 Broadway. Your transmittal noted that the project is scheduled for the 12/16/21 Planning Commission meeting; and please accept this letter as NVTA's formal comment to the Commission regarding the project.

As shown on the site plan, the project would provide 66 critically needed affordable apartments in the Broadway Residential zoning district. The Napa Valley Transportation Authority (NVTA) supports "Smart Growth" projects that encourage higher density and affordable housing in priority development areas near shopping and employment centers that are adjacent to transit routes. These projects reduce vehicle miles traveled by proximity to resources and encourage people to use alternative transportation modes.

NVTA, in partnership with the City and Caltrans, is completing the SR-29 Multimodal Improvement Project Initiation Document (PID). The PID is a precursor document to the environmental and design phases of the project and will allow NVTA to pursue critical federal and state discretionary fund sources to improve transportation infrastructure on the corridor. The multimodal improvements include transit, bicycle, pedestrian, operational, and safety improvements and beautification to the corridor.

We note the Napa Cove project site plan adds a new Broadway vehicle access driveway. The PID demonstrates that traffic flow is hindered by driveways and roadways that ingress onto and egress from Broadway because traffic movements disrupt roadway operations and complicate safety and design elements, such as proposed Class I and IV facilities, transit stops and transit passenger amenities. Whenever possible, NVTA suggests the City minimize additional driveway/roadway access to the highway, such as what is proposed in the Napa Cove project.

NVTA strongly urges that the Planning Commission to require the Napa Cove project developer to provide vehicle access from Melvin Road and that the development support alternative mode access along the Broadway corridor.

If you have any questions about the SR 29 PID please contact Danielle Schmitz, Director of Capital Development & Planning at dschmitz@nvta.ca.gov or me.

Sincerely,



Kate Miller
NVTA Executive Director

NAPA COVE APARTMENTS PROJECT DESCRIPTION

November 1st 2021

Napa County APN: 058-362-005, 058-362-016, and 058-362-021
Property Address: 3850 Broadway, American Canyon, CA 94503
Project Description: Develop existing 3.48 acre lot with 3 multi-family residential buildings housing 66 affordable housing units.
Entitlement Requests: Lot Merger – Removal of Protected Trees - Major Design Review

Overview

The project site is located in the City of American Canyon, at 3850 Broadway. The site is comprised of three adjacent plots approximately 3.48 acres in size with Assessor Parcel Numbers (APNs) 164-050-046-000 & 164-050-044-000 and in census tract 2011.06. The project will be applying for a lot merger to join the three parcels. The nearest major intersection to the site is Broadway and Donaldson Way, which is located 0.3 miles south of the site. The site is considered part of the Broadway District Specific Plan (BDSP) within the City of American Canyon and is surrounded by commercial and residential development. The site consists of three parcels and is currently vacant.

The proposed Napa Cove Apartments project consists of development of a 66-unit affordable family apartment complex with common areas, parking areas, and landscaping as well as a separate community building with a rental office, computer lab and open space for communal use. Once placed in service the Napa Cove Apartments community will provide housing for 66 individuals and families with incomes at or below 30% to 80% of the area median income. The 66 units in total consist of 16 one-bedrooms at 638 sq. ft., 32 two-bedrooms at 891 sq. ft., and 18 three-bedrooms at 1,105 sq. ft.

Property Constraints

The site is generally bordered by residential parcels on the west and north, a roadway to the east (Broadway – Hwy 29) and by commercial developments to the south. The site is relatively flat but will require some leveling work to prepare for development. Utility connections are available for connection, confirmed by the site location in between fully developed and occupied residential and commercial establishments across and along Broadway / Hwy 29. Off-site public improvements along Broadway / Hwy 29 are expected.

Compatibility with Planning Requirements

The site is located within the Broadway Residential (RB) district in the Broadway District Specific Plan (BDSP) which allows for multi-family residential development of no greater than 30 units per acre. The site area is approximately 3.48 acres, allowing up to 105 residential units. The proposed development will offer 66 units on a net area of 3.0 acres, for a density of approximately 22 units per acre.

The site is comprised of three adjacent plots, and the project will be applying for a lot merger to join the three parcels for the development. However, the site plan includes an open space area of approximately 0.48 acres towards the south of the proposed joined site along Broadway / Hwy 29, and this portion is intended to be split off into a separate parcel for future development.

Per the American Canyon Municipal Code (ACMC), the required parking for the proposed project is 141 (66 covered and 75 uncovered). Multifamily uses are required to provide one covered parking space and one half uncovered parking space for one-bedroom units, and two parking spaces per unit (one covered and one uncovered) for two-bedroom and three-bedroom units. The property will offer 84 parking spaces, (49 covered and 35 uncovered) fewer than the required 144 parking spaces. However, the ACMC Section 19.27.020 grants incentives for affordable housing developments that offer more than 10 percent low-income units, which can include a reduction in the parcel development standards for coverage, setbacks, and/or parking. As proposed, the project is eligible for zoning incentives and will be legally conforming.

The project site is undeveloped and contains grasses, weedy vegetation and a few scattered trees. Special status species are unlikely to nest within the project site. However, common birds protected by the Migratory Bird Treaty Act (MBTA) and/ or Fish and Game Code may nest within trees or on the ground within the project site. Development of the proposed project has the potential to impact protected bird nests due to the removal of vegetation or indirectly harm birds through the generation of noise, light, and other disturbances that could result in the abandonment of eggs and young. Therefore, if work takes place during nesting season (February 1st and August 31st) BDSP EIR MM BIO-1b would be implemented to avoid potential impacts to nesting birds and render the impact less than significant.

Design and Architecture

The project consists of three individual building types, that are a mix of two and three stories high with a modern industrial feel with flat roofs. All of the buildings will be wood framed construction, slab on grade, stucco building exteriors and vinyl windows. A barbeque area and a tot lot will also be provided.

There will be a total of 66 units consisting of 16 one-bedroom units at 638 sq. ft., 32 two-bedroom units at 891 sq. ft., and 18 three-bedroom units at 1,105 sq. ft. Each of the unit types will have a standard layout throughout the project with no variations. There are 28 units on the ground floor, all of which are considered accessible and adaptable, with ten of the ground floor units to have accessibility / mobility features installed. A further seven units will be equipped with hearing and visual aid equipment (HVI).

The building locations creates an open courtyard in the center of the property where the BBQ area and tot lot will be located in addition to an open play area. This location is by design, utilizing the building's mass to shield the courtyard from the noise of the adjacent roads. Bike racks will be attached to each of the individual buildings for the tenant's convenience, and 4 Electric Vehicle charging points will also be provided.

The proposed development will be designed in accordance with Greenpoint Certification requirements and energy modeling exceeding 15% of Title 24 requirements. The project design and development teams will endeavor to incorporate a suite of strategies and features to reduce energy consumption and increase energy efficiency, including but not limited to:

- Environmentally friendly construction and waste-management processes
- Energy efficient heating and cooling systems
- Energy Star kitchen and common area appliances
- High levels of insulation
- LED lighting and use of timers and sensors
- Quality, durable materials
- Solar for common areas
- State of the art waste management systems.
- Strategic window orientation, placement, size, shape, and shading
- Water-efficient plumbing and systems inside and outside

Incentives and Concessions:

Napa Cove Apartments community is a 100% affordable housing development providing residences for families with incomes at or below 30% to 80% of the area median income. Per the APMC Section 19.27.020 the project qualifies for three incentives and concessions to the parcel development standards for coverage, setbacks, and/or parking that are as follows:

1. Reduced parking:
 - a. allow 84 parking spaces to include all carports, open parking and electric charging stations and accessible spaces.
 - b. allow 49 covered stall spaces.
 - c. Waiving of the guest parking requirement with reliance on adjacent street parking instead.
2. Reduce the required building separation from 35 ft. to 30'-2". Due to the combination of easements in the middle of project site, side yards, and fire access requirements, the project can only provide 30 feet and 2 inches setback between building faces compared to the minimum 35 feet BDSPP requirement.
3. Reduce the BDSPP standard requirement for balconies and open patios from 6 ft and 8 ft respectively to allow for both balconies and patios with 5'-0" depths and a minimum 50 square feet. This is required to comply with the open space requirements across the site.

Conclusion:

Napa Cove Apartments has been designed to address the City of American Canyon's need for affordable multi-family housing. The design effort has been significant in adhering to the city's zoning regulations, BDSPP design guidelines, and local ordinances regarding native and endangered species and has made every effort to preserve existing environmental conditions and propose a development that addresses the city of American Canyon's affordable living requirements. In our opinion, the proposed development will provide a higher and better use of the site than the currently vacant site. Having these homes located at this site will help alleviate traffic along Broadway / Highway 29 as it will bring residents closer to jobs as well as proximity to bus tops and other mass transit routes. The proposed project could also be less impactful than other potential future developments at this site, which under the current zoning, would allow for a larger, and more dense project.

Architectural Narrative

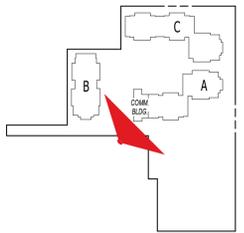
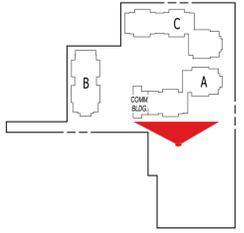
Napa Cove Apartments proposes a campus approach to multi-family housing by providing three residential buildings consisting of 66 total dwelling units and various common interior amenity space. Each residential building would be approximately 34ft in height, varying among two and three-stories, and provide a “Modern Industrial” architectural aesthetic.

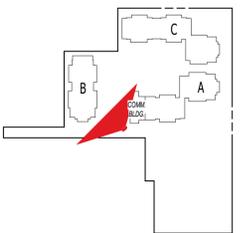
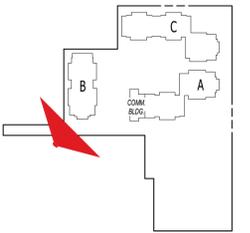
The proposed Site Plan attempts to accomplish two goals of cohesive and centralized common open space, while shielding and limiting the nuisance from Highway 29. Common open space includes a +/- 1,860 square foot Tot Lot (ages 2-6), multiple multi-Purpose rooms (with patios) that can be used as study rooms, game rooms, and various private event needs. Common open space for prospective residents are supported by inward facing units, and limiting highway-facing apartments. These internal spaces are shielded from the nuisance of Highway 29 by limiting the opening between Buildings A & C and providing building perimeter along the north and south of the central common area.

The “Modern Industrial” aesthetic is derived from re-appropriating traditional industrial materials at a more residential scale. The proposed massing gesture contains a base “stucco chassis”, which is then pushed and pulled to highlight and distinguish various uses within the buildings. The stucco is intended to be a warm grey color with a medium sand finish. The warm grey provides a natural color to blend with its neighboring buildings.

From this “stucco chassis”, the architectural massing gathers the living areas of each unit with the adjacent central circulation spine of each building. These areas are clad in grey brick and extrude forward from the “stucco chassis”. Further distinguishing and highlighting the entry/exit point. The proposed grey brick is elongated to a more utility size brick and proposed as a stacked bond, providing a residential scale, yet industrial feel. The secondary accent material is a fiber-cement board, colored in “Brushwork Red” (or similar color). The red is to symbolize the traditional red hues of brick used in more industrial settings. This material is applied at recessed areas within the “stucco chassis” and mark the bedrooms of each unit.

Windows are recessed and shaded at upper floors where sun orientation is strongest. Doors and windows are vinyl clad, with charcoal-colored frames and mullions. Glazing will comply with acoustic recommendations and current California Title 24 requirements. Roof-mounted mechanical equipment will be shielded from off-site views with parapets.





Proposed Napa Cove Utility Pole Locations

Broadway Frontage (3 Poles)



South On-Site Utility Pole



North On-Site Utility Pole





TITLE

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

RECOMMENDATION

A [Resolution](#) of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon adopt an Ordinance to amend the American Canyon Municipal Code Chapter 19.04 Definitions; Chapter 19.05 Commercial Classifications; Chapter 19.11 Commercial Zoning District; Chapter 19.49 Nonconforming Uses, Structures and Lots; and Broadway District Specific Plan Table 2-3 Permitted Uses to prohibit new and expanded service stations in the City of American Canyon that engage in the retail sale of motor vehicle fossil fuels (PL21-0028).

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

On October 28, 2021, the Planning Commission conducted a public hearing to consider a Zoning Code Amendment to prohibit new and expanded service stations in all zoning districts in the City of American Canyon. The Planning Commission continued the public hearing to the next regularly scheduled Planning Commission meeting for the following reasons:

1. Revise the proposed Nonconforming Uses, Structure, and Lots Chapter 19.49, Section 19.49.090(G) timeframe limit for a Fossil Fuel Service Station use to re-establish itself after a period of discontinuous use from twelve (12) months or more to one hundred eighty (180) days. The revised deadline is the same timeframe as other nonconforming uses in the City (see ACMC 19.49.040(A)).
2. For the City Attorney to prepare a "Force Majeure" deadline for nonconforming Fossil Fuel Service Stations to re-establish themselves after a period of discontinuous use. Force Majeure is defined as an extraordinary event or circumstance beyond the control of one or more parties.
3. The City Attorney will review the Draft Ordinance and may propose modifications consistent with current case law.

Based on the Commission direction, the draft ordinance has been revised as follows:

1. The Nonconforming Uses, Structure, and Lots Chapter 19.49, Section 19.49.090(G) timeframe limit for a Fossil Fuel Service Station use to re-establish itself after a period of discontinuous use was changed from twelve (12) months or more to one hundred eighty (180) days.

2. The City Attorney notes that a "Force Majeure" delay may have many causes. For this reason, there is no specific time period to identify in the Ordinance. The Ordinance has been revised to state that if the use has discontinued for one hundred and eighty (180) days or longer due to a force majeure issue, the nonconforming timeframe will be extended in accordance with a timeframe that receives the concurrence of the Community Development Director and the City Attorney.

3. The issue of "Force Majeure" is a new concept in the zoning code. A definition of Force Majeure has been added. The definition reads as follows:

"A Force Majeure Event is an extraordinary event or circumstance beyond the control of one or more parties that impacts their ability to perform. This definition of Force Majeure Event shall be limited to situations resulting in a declaration of a state or local emergency that was caused by acts of God or the elements, storms, wildfires, earthquakes, pandemics, wars, acts of terrorism, riots, or insurrection that significantly impact a party."

(Section 19.04.030 - Citywide Definitions).

A copy of the revised Service Station Ordinance is included as Attachment 1. The October 28, 2021 Planning Commission Agenda Report is included as Attachment 2.

Next Steps

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

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Community and Sense of Place: "Build on the strength of our local community to develop a clear 'sense of place' and establish our unique identity."

FISCAL IMPACT

N/A

ENVIRONMENTAL REVIEW

Consistent with Public Resources Code Section 21000, et seq., the California Environmental Quality Act, ("CEQA"), the proposed Zoning Code and Specific Plan Amendments are categorically exempt from environmental review in accordance with CEQA Guidelines Section 15307 Actions by

Regulatory Agencies for Protection of Natural Resources, and CEQA Guidelines Section 15308 Actions by Regulatory Agencies for Protection of the Environment. CEQA Guidelines Section 15307 and 15308 are applicable because the proposed amendments are intended to address Climate change impacts that pose an immediate and growing threat to California's economy, environment, safety, and public health.

ATTACHMENTS:

- [1. Fuel Station ZC PC Reso 12-16-21](#)
- [2. PC Staff Report Fuel Station ZC 10-28-21](#)

PC RESOLUTION NO. 2021-XX

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 28, 2021 and December 16, 2021 on the subject project, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

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

Zoning Code Amendments.

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

Chapter 19.04 – Definitions

Section 19.04.030 – Citywide Definitions

***Note to Codifier: Add this new definition.**

Force Majeure Event. A Force Majeure Event is an extraordinary event or circumstance beyond the control of one or more parties that impacts their ability to perform. This definition of Force Majeure Event shall be limited to situations resulting in a declaration of a state or local emergency that was caused by acts of God or the elements, storms, wildfires, earthquakes, pandemics, wars, acts of terrorism, riots, or insurrection that significantly impact a party.

***Note to Codifier: Add this new definition.**

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

Chapter 19.05 – Use Classifications

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

Section 19.05.050 – Commercial Classifications

***Note to Codifier: Delete this definition.**

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

***Note to Codifier: Add this new definition.**

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

***Note to Codifier: Add this new definition.**

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

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

Chapter 19.11 – Commercial Districts

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

Section 19.11.040 – Permitted Uses in Commercial Zoning Districts

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

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

Chapter 19.49 – Nonconforming Uses, Structure, and Lots

***Note to Codifier: Add this new Section 19.49.090.**

19.49.090 - Regulation of Fossil Fuel Service Station Uses and Structures

- A. Purpose.
1. Accommodate continued Fossil Fuel Service Station operation as a legal non-conforming use and describe when they may be deemed abandoned.
 2. Allow alterations to Fossil Fuel Service Station when such changes provide greater protection of the environment, safeguard public health and safety, facilitate the use of zero emission vehicles, or enable other uses permitted within the respective zoning district.
 3. Prohibit Fossil Fuel Service Station operations from increasing the storage and dispensing capacity of gasoline and any other fossil fuel.
- B. Applicability. This section applies to:
1. All lawfully developed and operating Fossil Fuel Service Station uses in existence prior to [insert ordinance effective date; i.e., January 1, 2022].
 2. All Fossil Fuel Service Station uses not yet developed and/or operating but subject to an approved and unexpired land use permit.
- C. Modifications to Fossil Fuel Service Station Uses, Generally. Except as provided below, Fossil Fuel Service Station uses and structures shall not be enlarged, extended, reconstructed or moved to a different portion of the lot or parcel of land occupied by such use. Examples of features subject to this provision include, but are not limited to retail fossil fuel sale, storage, conveyance, and dispensing (i.e., storage tanks, pumps, dispensers).
- D. Modifications to Improve Public Health and Safety. Fossil Fuel Service Station uses may be modified to conform to current public health and safety standards (i.e.: stormwater quality control regulations or

remediate contamination of the soil, groundwater, pedestrian and bicycle access safety, traffic control devices).

- E. Modifications to Enable Zero Emission Vehicles (Battery Charging Station). Fossil Fuel Service Station uses may be modified to accommodate battery charging station(s) for Zero Emission Vehicles.
- F. Modifications to Enable Zero Emission Vehicles (Hydrogen Fuel Cell Station). Fossil Fuel Service Station uses may be altered to include hydrogen storage, conveyance and dispensing facilities.
- G. Discontinuation of Fossil Fuel Service Station Uses or Structures. A Fossil Fuel Service Station Use shall not be re-established if such use has been discontinued for a continuous period of one hundred and eighty (180) days or longer, unless either of the following exceptions apply:
 - 1. If the use has discontinued for one hundred and eighty (180) days or longer because the nonconforming Fossil Fuel Service Station is subject to construction with a valid building permit that has not received final inspection, the nonconforming timeframe will be extended in accordance with the building permit application completion.
 - 2. If the use has discontinued for of one hundred and eighty (180) days or longer due to a Force Majeure Event, the nonconforming timeframe may be extended in accordance with a timeframe that receives the approval of the City Community Development Director and the concurrence of the City Attorney. The determination of whether an event or circumstance is a “Force Majeure Event” is to be made at the discretion of the City.

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

Broadway District Specific Plan

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

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

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 16th day of December, 2021, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Tyrone Navarro, Chair

ATTEST:

APPROVED AS TO FORM:

Nicolle Jones, Administrative Technician

William D. Ross, City Attorney

PLANNING COMMISSION
STAFF REPORTOctober 28, 2021
Public Hearing

SUBJECT

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

STAFF RECOMMENDATION

An Ordinance to prohibit new and expanded service stations in all zoning districts in the City of American Canyon that engage in the retail sale of motor vehicle fossil fuels (PL21-0028).

BACKGROUND AND ISSUES

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

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

The Broadway District Specific Plan (BDSP) is an important land use policy document intended to reduce greenhouse gas emissions with higher density housing served by transit coupled with pedestrian and bicycle facilities near commercial services, retail, and employment (Ordinance 2019-07 and Ordinance 2020-05). Designated as a Priority Development Area by the Association of Bay Area Governments, the BDSP is an important part of the Bay Area's Sustainable Community Strategy to reduce greenhouse gas emissions through smart growth planning policies.

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

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

Due to concerns of greenhouse gas emissions as well as market saturation and BDSP community character, the City Council adopted Ordinance 2021-03 on April 6, 2021. The Ordinance imposes an immediate 10-Month, 15-day moratorium on processing discretionary entitlements to establish, use,

and operate new fuel stations within the City of American Canyon. The Urgency Ordinance will expire on Monday, February 21, 2022 unless it is extended by the City Council through a subsequent Urgency Ordinance.

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

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

The updated General Plan 2040 will include comprehensive climate change policies to reduce greenhouse gas emissions and improve climate change adaptation. However, General Plan 2040 adoption is not contemplated before the end of Calendar Year 2022. The current General Plan lacks such policies. Thus, an amendment to the current General Plan is necessary before adopting new zoning regulations to limit fuel stations on the basis of reducing greenhouse gas emissions.

On June 24, 2021, the Planning Commission continued the workshop and provided feedback on proposed General Plan Land Use Element policies related to greenhouse gas emission, climate change and adaptation.

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

American Canyon Fuel Station Status

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

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

Climate Basis for a Fuel Station Prohibition

Government Code Section 65358 allows General Plan Amendments when it is deemed in the public interest to do so. According to the California Air Resources Board (CARB), transportation accounts for about 40% of the state's greenhouse gas (GHG) pollution in the State. This statistic places transportation as the leading source of GHG pollution. Contributions from the transportation sector include emissions

from fuel combustion by on-road and off-road vehicles, aviation, rail, and water-borne vehicles, as well as a few other smaller sources.

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

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

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

Zoning Code Amendments

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

Chapter 19.04 – Definitions

The Zoning Code Use Definition chapter defines terms used throughout the Zoning Code.

Section 19.04.030 – Citywide Definitions

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

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

Chapter 19.05 – Use Classifications

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

Section 19.05.050 – Commercial Classifications

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

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

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

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

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

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

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

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

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

Chapter 19.11 – Commercial Districts

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

Section 19.11.040 – Permitted Uses in Commercial Zoning Districts

Amend Table 1 to with the following changes:

1. Delete Gas Stations and automobile service facilities because this use is redundant with service station.
2. Change Service Station from Conditionally Permitted to Prohibited in the Neighborhood Commercial and Community Commercial zoning districts. And rename as Fossil Fuel Service Station.

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

Broadway District Specific Plan

Amend Table 2-3 with the following changes:

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

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

Chapter 19.49 – Nonconforming Uses, Structure, and Lots

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

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

19.49.090 - Regulation of Fossil Fuel Service Station Uses and Structures

A. Purpose.

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

B. Applicability. This section applies to:

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

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

- D. Modifications to Improve Public Health and Safety. Fossil Fuel Service Station uses may be modified to conform to current public health and safety standards (i.e.: stormwater quality control regulations or remediate contamination of the soil, groundwater, pedestrian and bicycle access safety, traffic control devices).
- E. Modifications to Enable Zero Emission Vehicles (Battery Charging Station). Fossil Fuel Service Station uses may be modified to accommodate battery charging station(s) for Zero Emission Vehicles.
- F. Modifications to Enable Zero Emission Vehicles (Hydrogen Fuel Cell Station). Fossil Fuel Service Station uses may be altered to include hydrogen storage, conveyance and dispensing facilities.
- G. Discontinuation of a Fossil Fuel Service Station Uses or Structures. A Fossil Fuel Service Station use shall not be re-established if such use has been discontinued for a continuous period of twelve (12) months or more. Exception: If the use has discontinued for 12-months or longer because the nonconforming Fossil Fuel Service Station is subject to construction with a valid building permit that has not received final inspection, the nonconforming timeframe will be extended in accordance with the building permit application completion.

Next Steps

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

ENVIRONMENTAL REVIEW

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

1. Napa Climate Action Now letter
2. Climate Change Proclamation
3. Urgency Ordinance 2021-03
4. Fuel Station Locations
5. Vehicle Greenhouse Gas Emissions – 2017
6. CARB Report
7. Executive Order N-79-20
8. Redline General Plan Land Use Element Amendments



**City of American Canyon
Active Community Development Projects
December 2021**

Project Applications Under Review						
No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
1.	Napa Logistics Park Annual DA Review (PL21-0034)	Orchard Partners	Required annual review of the Napa Logistics Park Development Agreement	South of Napa Airport	11/15/21 Application submitted	Brent Cooper
2.	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	Brent Cooper
3.	Wright Conditional Fence Permit (PL21-0032)	Damon and Blanca Wright	Increase a portion of the north and south rear yard fence to 8-feet.	46 Goldeneye	11/8/21 Application submitted 12/3/21 Application approved	William He
4.	Watson Ranch Lot Line Adjustment (PL21-0031)	McGrath Properties	Lot Line Adjustment for Lots 3, 6, 8, and 10	Watson Ranch	10/30/21 Application submitted 11/29/21 Application approved	William He
5.	Rio Del Mar Parcel Map Extension (PL21-0030)	AXIA LLC	Extend the tentative parcel map from December 17, 2021 to December 17, 2022	NE intersection of West Carolyn Drive and Rio Del Mar	10/21/21 Application submitted 11/15/21 City Council approved	William He
6.	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	Brent Cooper
7.	The Residences at Napa Junction Preapplication (PL21-0026)	American Canyon Ventures LLC – 89-3990238	Proposed apartment with 452 dwelling units. 15% would be affordable to very low-income residents.	Northwest of Napa Junction III Shopping Center 15.05 acres	9/29/21 Application submitted 11/3/21 PRC Meeting with Applicant 11/3/21 Comments to Applicant	William He

Project Applications Under Review						
No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
8.	Core Tree Care Administrative Design Permit (PL21-0025)	Core Tree Care	Contractor for PG&E to process vegetation cleared from PG&E powerline easements.	352 Green Island Road 4.8 acres	9/21/21 Application submitted 9/24/21 Comments to applicant 10/12/21 Application resubmitted 11/6/21 Comments to Applicant 12/6/21 Application resubmitted	William He
9.	Napa Cove Design Permit (PL21-0027)	CRP Affordable Housing	Preapplication to review the Napa Cove affordable housing project.	3508 Broadway 3.48 acres	10/1/21 Application submitted 10/13/21 PRC meeting with Applicant 10/21/21 Comments to Applicant 11/10/21 PRC meeting with Applicant 11/8/21 Application resubmittal 12/1/21 Comments to Applicant 12/16/21 PC Meeting scheduled	William He
10.	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
11.	Giovannoni Logistics Center (PL20-0042)	Buzz Oates Construction	EIR for approximately 2.4 million sqft logistics center and Design Permit for two warehouses. Building A is 627,976 square feet; and Building B is 469,512 square feet	300 Green Island Road (Bldg A) 1200 Devlin Road (Bldg B) 70 acres	11/13/20 Application submitted 12/12/20 Comments to applicant 01/05/21 Application resubmitted 01/12/21 Notice of Preparation (NOP) published 2/3/21 NOP scoping meeting 3/10/212 Comments to applicant 9/17/21 Meeting with applicant. December Admin draft EIR anticipated	Brent Cooper

Project Applications Under Review						
No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
12.	Giovannoni Logistics Center (PL20-0043)	Buzz Oates Construction	Tentative Parcel Map for the Giovannoni Logistics Park	North of Green Island Road and East of future Devlin Road 70 acres	11/13/20 Application submitted 12/12/20 Comments to applicant 01/05/21 Application resubmitted 3/10/21 Comments to applicant 7/13/21 Application resubmitted 8/6/21 Comments to applicant 9/17/21 Meeting with applicant. December Admin draft EIR anticipated	Brent Cooper
13.	Oat Hill Lot Line Adjustment (PL20-0039)	Oat Hill Properties II, LLC	Increase Lot C of 14 RM 4 from 10.17 acres to 13.59 acres; and decrease Parcel F of 12 RM 53 from 10.64 acres to 7.22 acres.	Southwest corner Hess Road and Napa Junction Road	10/2/20 Application submitted 11/7/20 Comments to applicant 2/25/21 Application resubmittal 3/1/21 Comments to applicant 3/11/21 Application deemed complete	Paul Wade
14.	7-11 Gas Station Conditional Use Permit (PL20-0035)	Best American Canyon Partners	Proposed 7-11 gas station	218 American Canyon Road	10/13/20 Application submitted. 11/11/20 Comments to applicant. Project on hold due to Fuel Station 10-month, 15-day moratorium	William He
15.	Hampton Inn Hotel Zone Change and Design Permit (PL20-0029, PL20-0030)	AMS Associates, Inc.	New 3-story, 106 room Hampton Inn Hotel.	3443 Broadway 2.52 acres	8/26/20 Application submitted 9/21/20 Comments to applicant 12/1/20 CC Zone Change Workshop 12/21/20 Application resubmitted 1/25/21 Comments to applicant 10/5/21 CC/PC workshop 10/28/21 PC recommends approval 11/16/21 City Council first reading approved 12/7/21 City Council second reading and CUP scheduled	William He

Project Applications Under Review						
No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
16.	SDG Commerce 217 Distribution Center (PL20-0008)	SDG Commerce 217, LLC	Conditional Use Permit for a new 217,000 sqft distribution warehouse.	1075 Commerce Court 10.39 acres	3/18/20 Application submitted 4/8/20 Comments to applicant 6/23/20 Second Submittal 1/28/21 PC Review continued to 2/25 2/25/21 PC Approved 3/5/21 Appeal Received 4/1/21 30-day Recirculated MND begins 5/4/21 30-day review period extended to 6/3/21 7/20/21 City Council appeal continued August 17. 8/17/21 City Council tabled item to December 2021 12/7/21 City Council continued hearing 90 days	William He
17.	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
18.	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. Lemos Pointe Grading Permit (DV21-0007)	Rough grading for the Lemos Point Apartment Project	Northwest corner Loop Road/Rio Del Mar	6.7 acres	6/9/21 Application submitted 8/9/21 Application approved.	Edison Bisnar
2. Napa Junction III Building 6B (BP19-0495)	Construct a 6,000 sqft single story medical office building.	416 Napa Junction Road	1.06 acres	11/26/19 Application submitted 2/13/20 Awaiting completion of improvement plans 9/30/20 Permit approved 5/25/21 Permit issued	William He
3. Napa Junction III Building 6B (DV20-0001)	Improvement plans for a 6,000 sqft single story medical office building.	416 Napa Junction Road	1.06 acres	2/18/20 Application submitted 3/10/20 Received revised stormwater plans 9/30/20 DV Plans approved. 5/25/21 Construction started	Edison Bisnar
4. Fume Commercial Cannabis Will Serve (DV20-0014)	Extend reclaimed water line to supply irrigation demand of the project.	180 Klamath Court	1.37 acres	12/16/20 Will serve and wastewater study received 1/28/21 PC approved the CUP 3/26/21 Will Serve comments to the applicant.	Edison Bisnar

Major Building/Grading Permits					
Project Name	Description	Location	Area	Status	Staff Liaison
5. Canyon Estates (DV18-0023)	Improvement plans, grading plans, potable water pump station plans and Final Map.	Northeast corner Silver Oak/ Newell Drive	35 acres	10/31/18 Applicant submitted 4/17/19 3 rd submittal received 5/22/19 Pump station submittal received 6/13/19 Grading and Improvement Plan Comments to applicant 7/14/20 Preconstruction meeting 3/19/21 Preconstruction meeting 3/22/21 Begin Construction	PW Engineering
6. Canyon Estates Lot Line Adjustment (PL19-0011)	Lot Line adjustment to consolidate habitat area in Napa County.	Northeast corner Silver Oak/ Newell Drive	35 acres	4/18/19 Lot line adjustment application submitted 6/13/19 Comments to applicant	Paul Wade

Major Building/Grading Permits					
Project Name	Description	Location	Area	Status	Staff Liaison
7. 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 1 st Submittal received 10/1/20 1 st Plan Check returned 12/3/20 2 nd Submittal received 2/11/21 2 nd Plan Check returned	Edison Bisnar
8. Home2Suites Will Serve and Improvement Plan (DV19-0015)	Will serve application and improvement plans for a 102-room hotel.	3830 Broadway	2.0 acres	9/5/19 Will Serve Application submitted 5/25/20 Improvement Plan Application submitted 3/15/21 5th Submittal received. 5/17/21 DV approved. 7/9/21 Fee Reduction Request Received 8/19/21 Comments to applicant 9/16/21 and 10/7/21 Applicant submittal	Edison Bisnar
9. Home2Suites Building Permit (BP19-0499)	Building permit for 102 room hotel.	3830 Broadway	2.0 acres	12/3/19 Application submitted 12/19/19 Comments to applicant 3/9/20 Checked in with applicant 4/15/20 Building resubmittal 5/1/20 Comments to applicant 07/16/20 Building resubmittal 07/24/20 Comments to applicant 09/17/20 Building resubmittal 09/25/21 Comments to applicant 02/01/21 Waiting fire sprinkler plan submittal.	Interwest

Major Building/Grading Permits					
Project Name	Description	Location	Area	Status	Staff Liaison
10. Napa Logistics Building 3 (BP20-0179)	Building permit for new 201,839 sqft warehouse.	300 Boone Drive	24.5 acres	05/26/20 Application submitted 09/10/19 Comments to applicant 9/10/20 Permit Issued 02/18/21 Forms and Footings inspection 4/13/21 Walls and insulation installed 4/27/21 HVAC equipment installation 6/15/21 A 60-Day Temporary Occupancy Permit approved for interior stocking. 8/6/21 Final C/O issued	Interwest
11. 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
12. 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

Major City-Initiated Projects					
Project Name	Description	Location	Area	Status	Staff
1. Fuel Station zoning code amendment (PL21-0028)	Amend the zoning code to prohibit fossil-fuel stations in American Canyon and modify nonconforming standards for existing fuel stations.	Citywide	N/A	10/7/21 Project initiated 10/28/21 Planning Commission hearing 12/16/21 Planning Commission meeting scheduled	Brent Cooper
2. Fuel Station Urgency Ordinance (PL21-0005)	Potential moratorium on new fuel stations in American Canyon	Citywide	N/A	2/2/21 City Council workshop 2/16/21 City Council hearing continued to 3/2/21 3/2/21 City Council approved 45-day urgency ordinance 4/6/21 10 month, 15-day urgency ordinance approved	Brent Cooper
3. 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) 9/17/19 Joint CC/PC meeting to discuss scope of work 9/15/20 Council workshop to discuss revised scope. 3/24/21 Circulation Committee meeting. 6/15/21 Council workshop on WSC alternatives 10/5/21 CC/PC workshop	Brent Cooper
4. Paoli/Watson Lane Annexation (PL19-0003)	General Plan Amendment, rezoning, and annexation of the Paoli/Watson Lane Property.	Southeast of Paoli Loop/SR-29	80 acres	9/5/17 City Council authorization to proceed 5/28/20 City received a Property Owner notice of intent to circulate a petition to annex the Paoli Loop/Watson Lane Property.	Bill Ross, City Attorney

Major Regional Projects					
Project Name	Description	Location	Area	Status	Staff Liaison
1. Napa Valley Transportation Authority 2045 Countywide Transportation Plan	Update the 2015 NVTA Countywide Plan with new mobility priorities for the next 25 years.	Napa County	N/A	8/19 Project Kick-off 9/19 – 01/20 Public Input 01/21 Drafting the Plan	Alberto Esqueda (NVTA)
2. 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	Kate Miller