



# Ursa Residential Project Initial Study

City of Fremont

June 21, 2017

FINAL

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## Quality information

### Prepared by

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Various authors

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### Approved by

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Emma Rawnsley

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## Revision History

Revision	Revision date	Details
0	May 24, 2017	Draft Initial Study, for City review
1	June 20, 2017	Screencheck Initial Study, for City approval
2	June 21, 2017	Final Initial Study, for public release

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## Acronyms and Abbreviations

AAA	All Ages and Abilities
AADT	annual average daily traffic
AB	Assembly Bill
AC Transit	Alameda–Contra Costa Transit District
ACM	asbestos-containing materials
ACTC	Alameda County Transportation Commission
ACWD	Alameda County Water District
ADA	Americans with Disabilities Act
ADT	average daily traffic
AF/yr	acre-feet per year
ARB	California Air Resources Board
ARG	Architectural Resources Group
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit District
BMP	best management practices
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geologic Survey
CH <sub>4</sub>	Methane
City	City of Fremont
CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	Carbon dioxide-equivalents
CRHR	California Register of Historical Resources
CWP	Clean Water Program
CY	cubic yards
dBA	A-weighted sound levels
DOF	California Department of Finance
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
FUSD	Fremont Unified School District
General Permit	Statewide General Construction Activities Stormwater Permit
GHG	greenhouse gas

gpd	gallons per day
GWP	global warming potential
HARB	Historic Architectural Review Board
HASP	health and safety plan
HOT	high occupancy toll
HOV	high occupancy vehicle
I-680	Interstate 680
I-880	Interstate 880
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
ITS	intelligent transport system
LBP	lead-based paint
lbs/day	pounds per day
L <sub>dn</sub>	day-night average noise level
L <sub>eq</sub>	equivalent noise level
L <sub>max</sub>	maximum noise level
LOS	Level of Service
LRA	Local Response Area
mgd	million gallons per day
MGY	million gallons per year
MRP	Municipal Regional Permit
MSL	mean sea level
MTCO <sub>2e</sub>	carbon dioxide equivalent
MUTCD	Manual on Uniform Traffic Control Devices
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	federal Occupational Health and Safety Administration
p,p-DDE	p,p-dichlorodiphenylethylene
PDA	priority development areas
PM	particulate matter
PM <sub>10</sub>	particulate matter equal to or less than 10 micrometers in diameter
PM <sub>2.5</sub>	particulate matter equal to or less than 2.5 micrometers in diameter
PPV	peak particle velocity
Ramboll	Ramboll Environ US Corporation
rms	root mean square
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
Scoping Plan	Climate Change Scoping Plan
SF	square-foot
SFBAAB	San Francisco Bay Area Air Basin

SLF	Sacred Lands File
SLOAPCD	San Luis Obispo County Air Pollution Control District
SMP	soil management plan
SO <sub>2</sub>	sulfur dioxide
SR 262	State Route 262
SR2S	safe routes to school
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TIA	transportation impact analysis
tpd	tons per day
UCMP	University of California, Berkeley Museum of Paleontology's
USD	Union Sanitary District
USGS	United States Geological Survey
UWMP	urban water management plan
VdB	vibration decibels
VTA	Santa Clara Valley Transportation Authority
WTP2	Water Treatment Plant No. 2

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# 1. Introduction

- 1. Project Title:** Ursa Residential Development Project (PLN2017-00188)
- 2. Lead Agency Name and Address:** City of Fremont Community Development Department,  
39550 Liberty Street, 1st Floor, Fremont, CA 94538
- 3. Lead Agency Contact:** Bill Roth, Associate Planner  
Phone: (510) 494-4450  
Email: broth@fremont.gov
- 4. Project Location:** 48495 Ursa Drive, Fremont, CA
- 5. Assessor Parcel Number(s):** 519-1080-047
- 6. Project Sponsor's Name and Address:** Robson Homes, Attn.: Mike Enderby,  
2185 The Alameda, Suite 150, San Jose, CA 95126
- 7. General Plan Designation(s):** Residential - Low (2.3-8.7 dwelling units per acre)
- 8. Zoning Designation(s):** R-1-6 (existing)  
Planned District (proposed), Single-family Residential

## 2. Project Description

### 2.1 Project Site and Vicinity

The project site is a 2.67-acre parcel with its primary frontage on Ursa Drive in the southern portion of the City of Fremont near the north-south Interstate 680 (I-680) corridor. The main area of the site is rectangular in shape, with a narrow strip extending to Warm Springs Boulevard (providing current site access). The project site and vicinity is shown in Figure 2-1. The site is relatively flat, sloping gently towards the west, from an elevation of approximately 75 feet mean sea level (MSL) to 48 feet MSL. The subject property contains a ca. 1928 house, ca. 1905 barn, and outbuildings, which are remnants of a larger 12.35-acre fruit farm dating back to 1905. These prior uses may be the source of elevated levels of various hazardous materials, including pesticides and petroleum hydrocarbons, in the shallow soils of the project site. Figure 2-2 shows the current layout of the project site, and Figure 2-3 shows the existing house.

### 2.2 Surrounding Land Uses

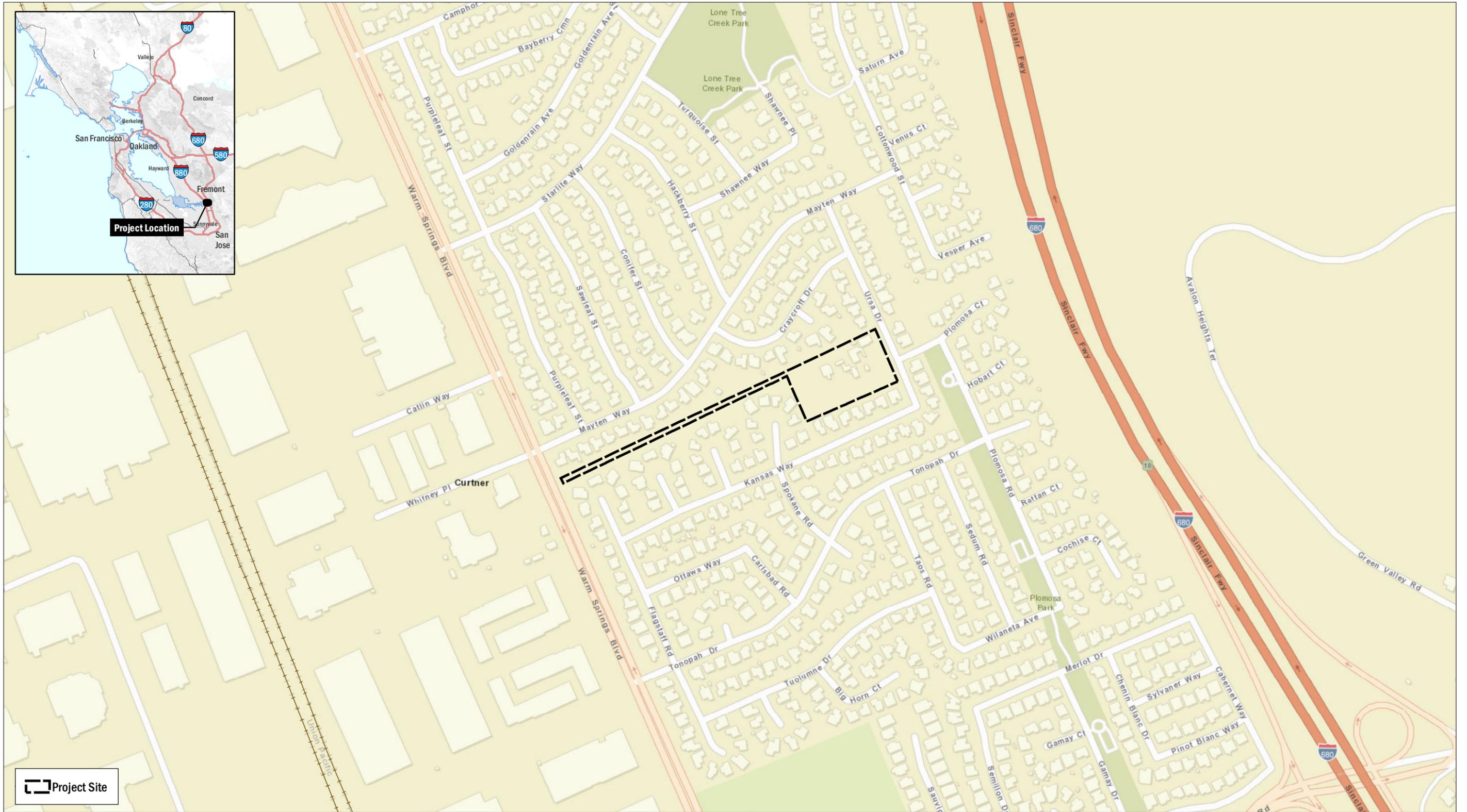
The project site is bounded by an Alameda County Flood Control District channel along the north, Ursa Drive to the east, and residential properties to the south and west. The immediate surrounding area, between I-680 and Warm Springs Boulevard, consists of modern detached one- and two-story single-family residences. The area west of Warm Springs Boulevard is dominated by industrial uses, and the area east of I-680 is dominated by lower density hillside development along the foothills of Mission Peak Regional Preserve.

### 2.3 Project Characteristics

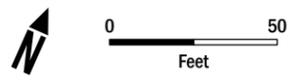
The project proposes development of a 24-lot subdivision that would contain 18 single-family residences (17 new homes and relocation of the existing on-site home that is eligible for historic listing), as shown in Figure 2-4. One lot, in the southwest corner, would contain a biotreatment pond for on-site stormwater management. One lot (Lot F shown on Figure 2-4) extends from the rectangular portion of the site to Warm Springs Boulevard, and would be a common area lot providing private pedestrian access for the residential lots and possibly vehicular access for Lot 10; alternatively, Lot F may be deeded to the existing lots abutting it and incorporated into the rear yards of those lots. The remaining four lots would be dedicated for access purposes including a private cul-de-sac and driveways, sidewalks, parking, and street trees.

The project site is within the Warm Springs Community Plan Area of the Fremont General Plan. The project would rezone the 2.67-acre site from R-1-6 to a Planned District, to allow more flexibility in application of development standards, which would facilitate preservation of an historic home and tankhouse at the site. The proposed residential density of 6.73 dwelling units per acre would comply with the site's Residential - Low General Plan land use designation (2.3 to 8.7 dwelling units per acre).

The property and existing original farmstead structures on the site (single-family residence, tankhouse, barn, and other accessory structures) have been evaluated as potentially eligible for the California Register of Historical Resources and National Register of Historic Places (ARG, 2017 and Basin Research Associates, Inc., 2002). The existing eligible historic home and tankhouse structures, currently near the center of the project site, would be relocated to the southeast corner of the site and rehabilitated, including an addition to the dwelling. The other existing structures on the project site would be demolished.



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Imagery: ESRI, 2017

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2. VIEW FROM THE WEST



3. FRONT ELEVATION (SOUTH-WEST)



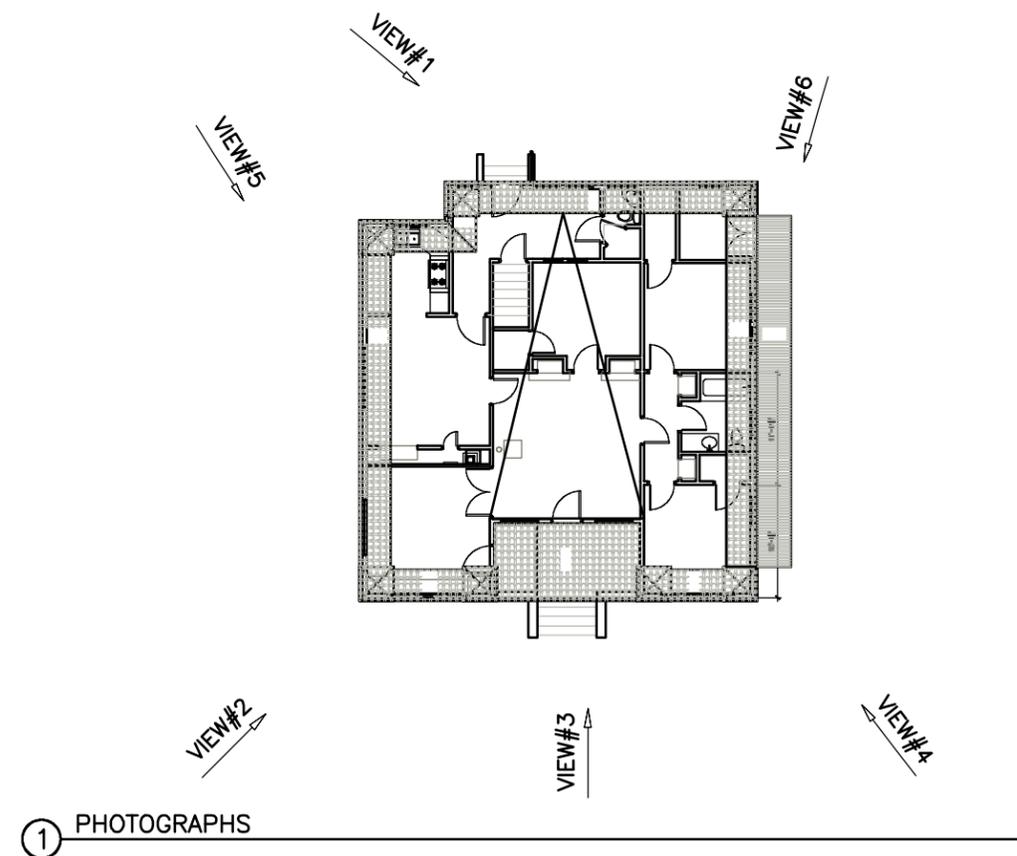
4. VIEW FROM SOUTH



5. VIEW FROM THE NORTH CORNER



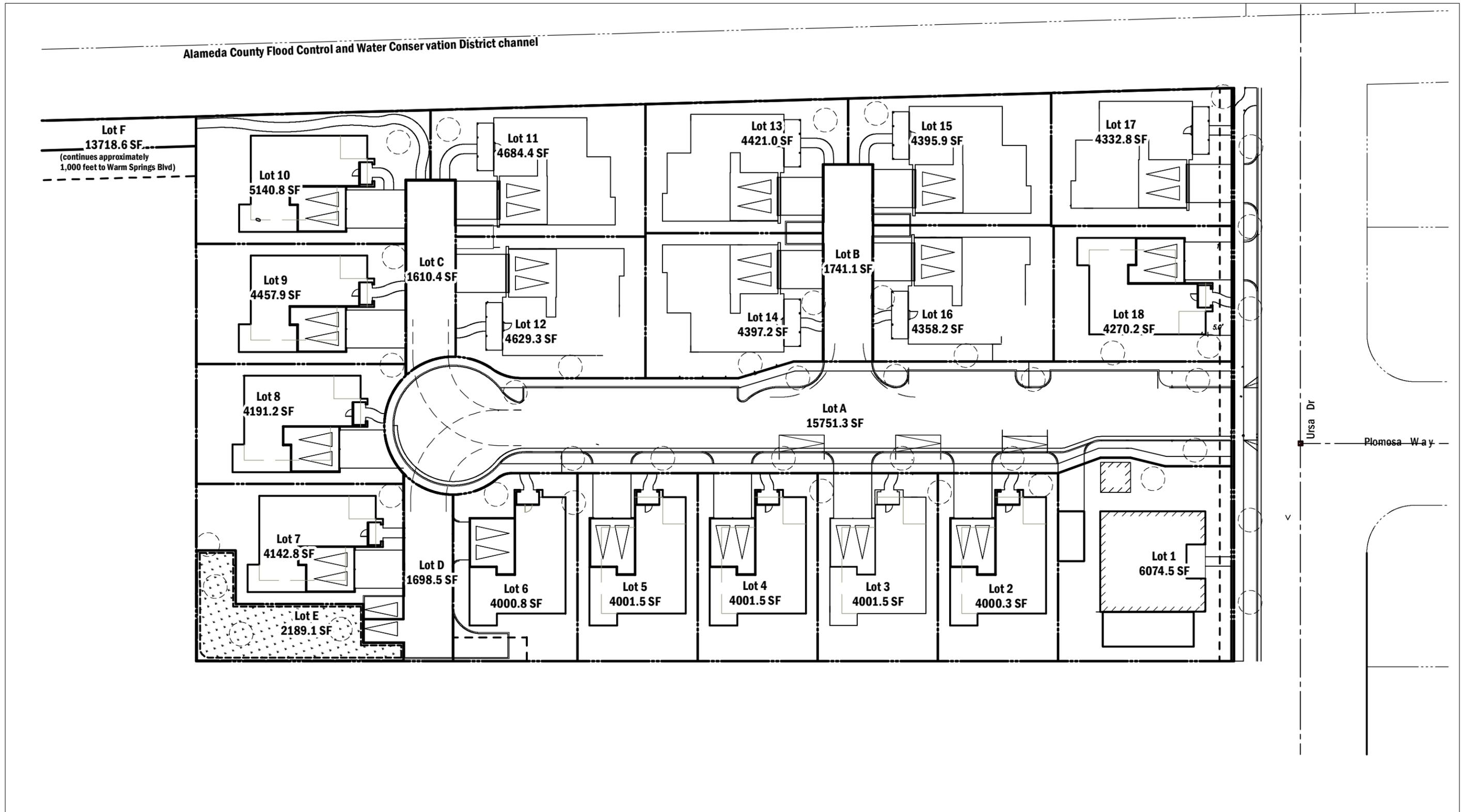
1. VIEW FROM THE NORTH



6. VIEW FROM THE NORTH-EAST

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### 2.3.1 Relocation and Rehabilitation of Existing Structures

The proposed project would relocate the existing historic house and tankhouse from their present locations onto proposed Lot 1, a 6,075 square-foot (SF) lot abutting Ursa Drive in the southeast corner of the site. With this relocation, the house's orientation would be changed, so that the front door of the historic house would face east towards Ursa Drive. An addition and new detached garage would be constructed on the south side of the relocated house.

The proposed project would include repair to the existing house including repainting of the existing windows and doors, roof forms, and exterior plaster finish, although some doors and windows would be replaced, depending on the level of deterioration. The existing façade and other character defining architectural features would be maintained. Existing non-historic structures (trellis-covered lean-to) would be removed. Figures 2-5 through 2-9 show the proposed conceptual plans to relocate and rehabilitate the existing house. These plans would be further revised prior to permitting.

To facilitate the relocation of the historic house, the structure would be unsecured from the existing foundation so that that it could be raised using a series of coordinated hydraulic jacks. Once elevated, temporary support beams and a dolly system (portable wheel units) would be placed under the structure and existing foundation removed where needed. A large truck or tractor would then slowly move the house directly to the new location next to Ursa Drive. The house would again be raised by hydraulic jacks and supported by heavy, cross-stacked timbers while a new raised concrete foundation is constructed below. The transport beams and dolly system would then be removed. The structure would be lowered by hydraulic jacks and secured onto the new foundation. The house would be moved as a singular unit and not cut into smaller parts for transport purposes. The tankhouse would be relocated in a similar fashion, but might be raised on to dollies using a crane.

### 2.3.2 New Residential Homes

The proposed project would construct 17 new two-story single-family homes on lots that would range in size from 4,000 to 5,140 SF. Each home would have a footprint of between 1,843 and 2,009 SF, and gross floor area of between 2,800 and 3,030 SF. Maximum building height would be up to 27 feet. Building setbacks would range from 11 to 17 feet off Ursa Drive; and from seven to ten feet off the private road. Building separation distances would be at least 10 feet, with greater separations of 15 feet between second floors in most instances.

The above referenced measurements and calculations are approximate and would be refined as the final plans and maps are prepared for project entitlement. Typical elevations of the proposed homes are shown in Figure 2-10 and 2-11.

## 2.4 Access and Circulation

Proposed site access would be from a new private cul-de-sac off Ursa Drive (proposed Lot A), with three shared driveways (proposed Lots B, C and D), as shown in Figure 2-4. The existing site access off Warm Springs Boulevard may be removed as part of the project and deeded to abutting private properties to the south. Alternatively, the existing pavement may be retained and maintained as necessary to provide private pedestrian access for the proposed residential lots or possibly vehicular access for proposed Lot 10.

## 2.5 Utilities and Service Systems

The proposed project would include utility connections to adjacent existing services in Ursa Drive, as illustrated in Figure 2-12.

The following utility providers are proposed:

- Water Supply            Alameda County Water District
- Fire Protection        City of Fremont Fire Department
- Sanitary Sewer        Union Sanitary District
- Storm Drain            City of Fremont and Alameda County Flood Control District
- Gas and Electricity    Pacific Gas and Electric (PG&E)
- Solid Waste            Republic Services
- Telephone             AT&T
- Cable Television       Comcast

The on-site storm drainage system would be designed to mimic existing drainage patterns and treat stormwater runoff from developed areas at a proposed on-site bioretention facility (proposed Lot F, in the southwest corner). Stormwater would infiltrate locally or be collected in a drainage system that discharges to the curb. Stormwater would then drain to the public storm drain system on Ursa Drive or would be conveyed to the on-site bioretention basin in the southwestern corner of the site. The bioretention basin would treat stormwater runoff prior to it being discharged to the public storm drain system in Kansas Way through a storm drain easement to the southwest.

## 2.6 Landscaping and Other Improvements

The project site contains approximately 112 trees, including privet, walnut, almond, apricot, lemon, buckeye, silk tree, fig, tree of heaven, loquat, juniper, and Peruvian pepper. All existing trees would be removed as part of the project. Approximately 20 of the existing trees have some ornamental value, and ten are considered “trees of exceptional adaptability to the Fremont area” under the Tree Preservation Ordinance (Fremont Municipal Code [FMC] Chapter 18.215).

The removal of protected trees is subject to requirements involving the planting of replacement trees or the payment of in-lieu fees to mitigate the removal of trees that cannot be replaced on-site due to land area constraints, in accordance with the mitigation requirements of the City’s Tree Preservation Ordinance (FMC Chapter 18.215).

Approximately 41 trees, including 20 *Pistacia chinenses* and several other species, would be planted as part of the project, following construction, consistent with the requirements of the City’s Tree Preservation Ordinance. The proposed project would include low-medium water-use landscaping at the bioretention basin, and in the front yard/curb areas of the residential lots (Design Focus, 2017). The proposed trees and mitigation for loss of existing trees (quantity and type) are subject to the approval of the City of Fremont Landscape Architect.

The proposed project would include a six to seven-foot “good neighbor” fence (vertical board-on-board slats) between residential lots.

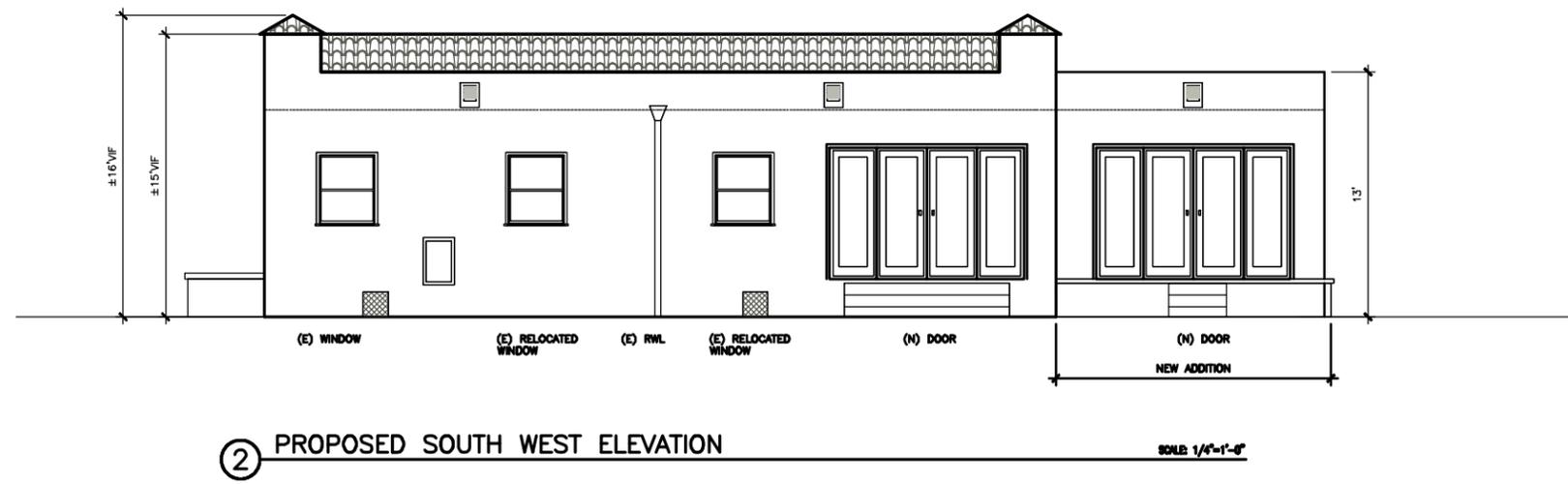
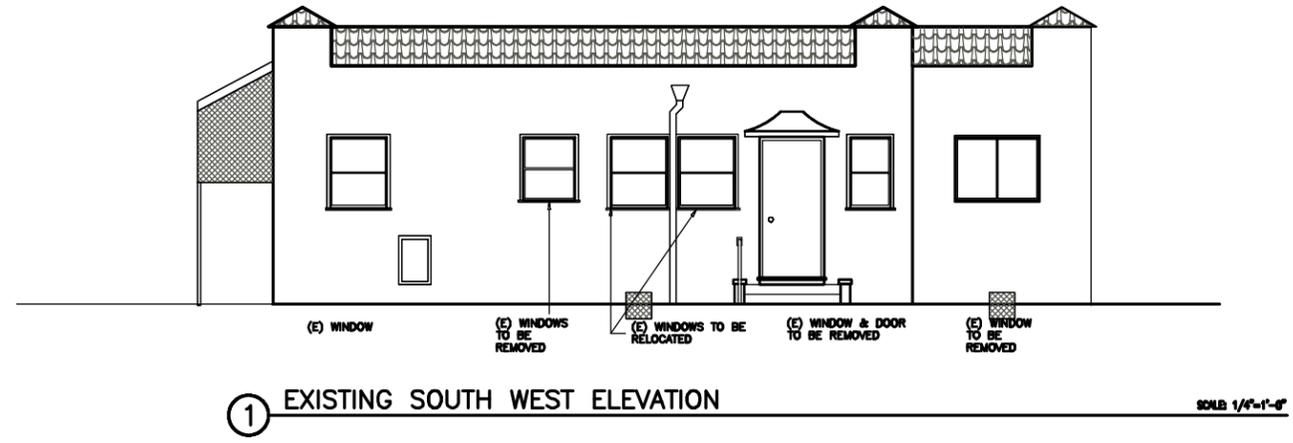
## 2.7 Construction Activities and Schedule

### 2.7.1 General Construction Activities

Typical construction equipment such as graders, backhoes, excavators, and dozers would be used for site preparation and construction. No pile-driving or blasting is anticipated. Equipment and materials would be staged for construction within established work areas on the project site.

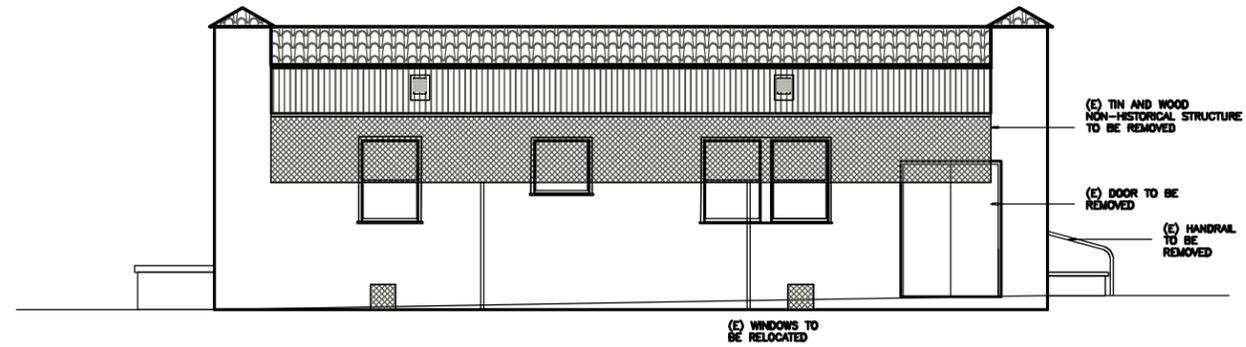


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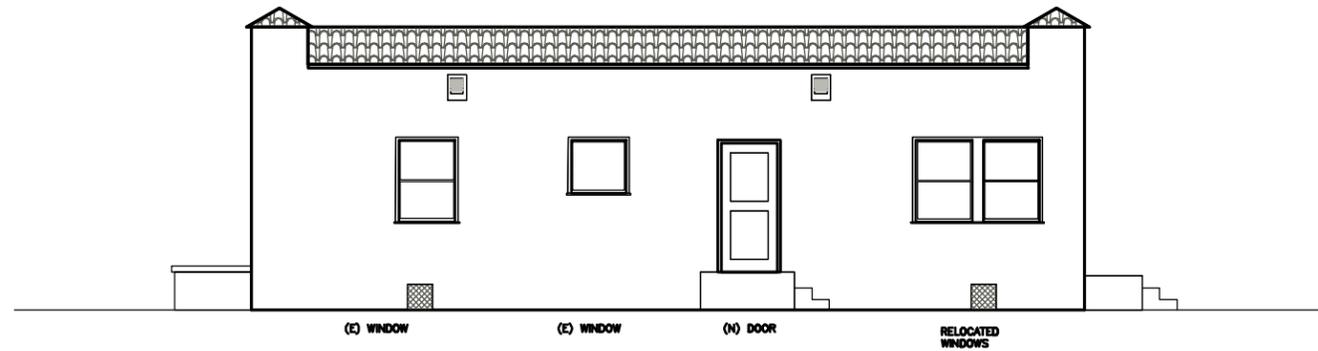
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① EXISTING NORTH WEST ELEVATION

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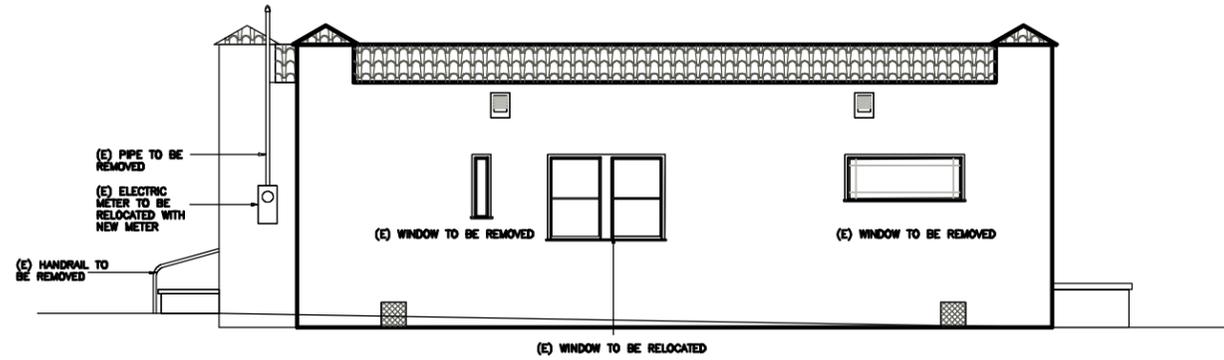


① PROPOSED NORTH WEST ELEVATION

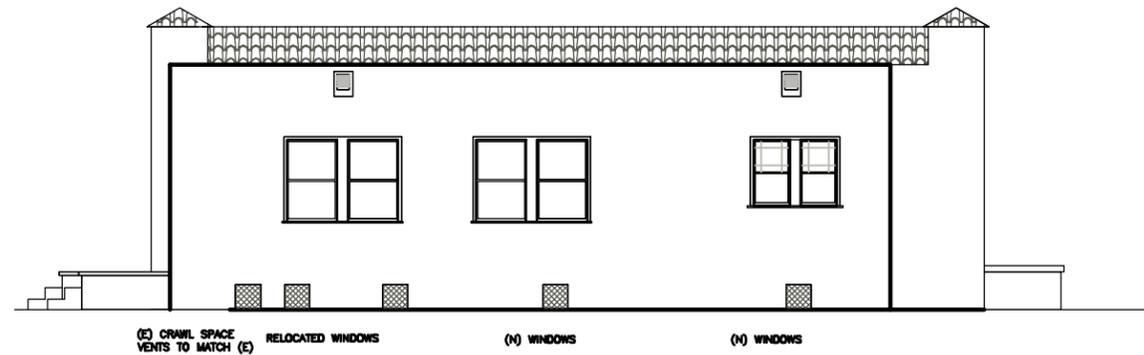
SCALE: 1/8"=1'-0"

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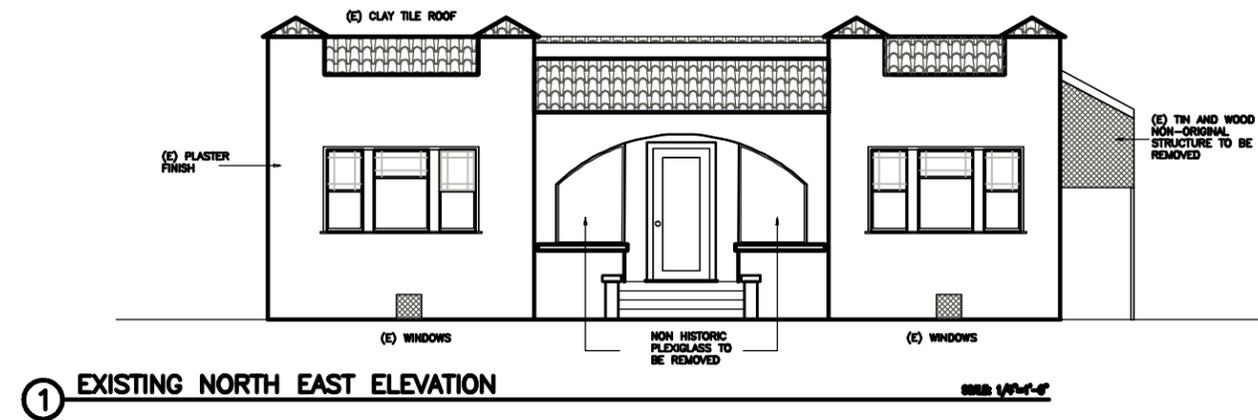
① EXISTING SOUTH EAST ELEVATION SCALE 1/8"=1'-0"



② PROPOSED SOUTH EAST ELEVATION SCALE 1/8"=1'-0"

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25' 10.5"

**FRONT ELEVATION**

SCALE: 1/4" = 1'-0"



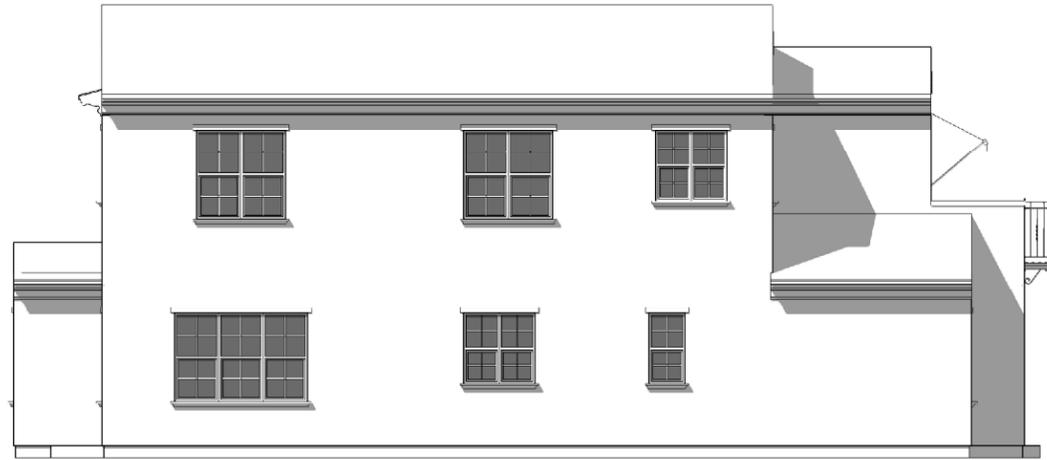
**RIGHT ELEVATION**

SCALE: 1/4" = 1'-0"



**REAR ELEVATION**

SCALE: 1/4" = 1'-0"



**LEFT ELEVATION**

SCALE: 1/4" = 1'-0"

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25' 6 1/4"

**FRONT ELEVATION**

SCALE: 1/4" = 1'-0"



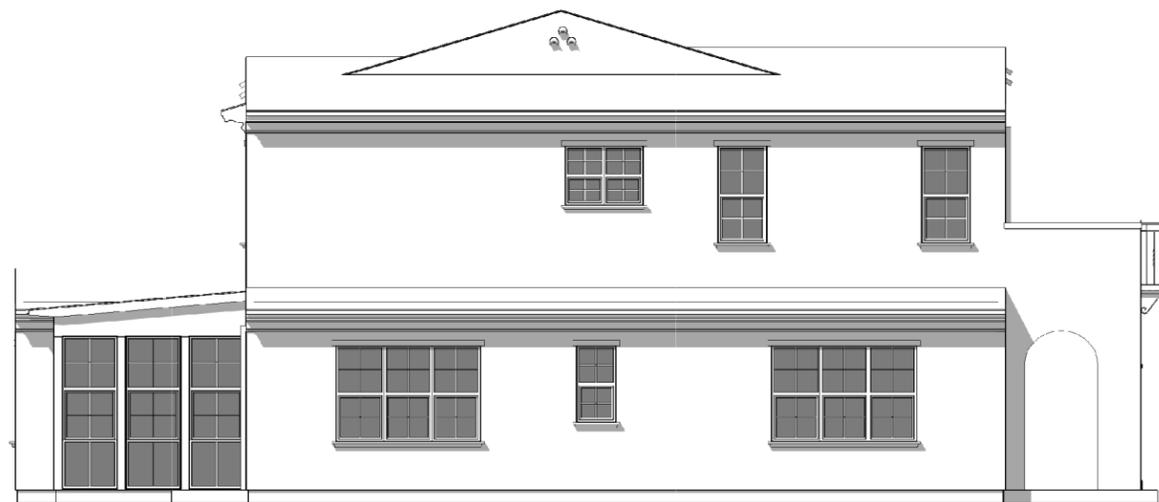
**RIGHT ELEVATION**

SCALE: 1/4" = 1'-0"



**REAR ELEVATION**

SCALE: 1/4" = 1'-0"



**LEFT ELEVATION**

SCALE: 1/4" = 1'-0"



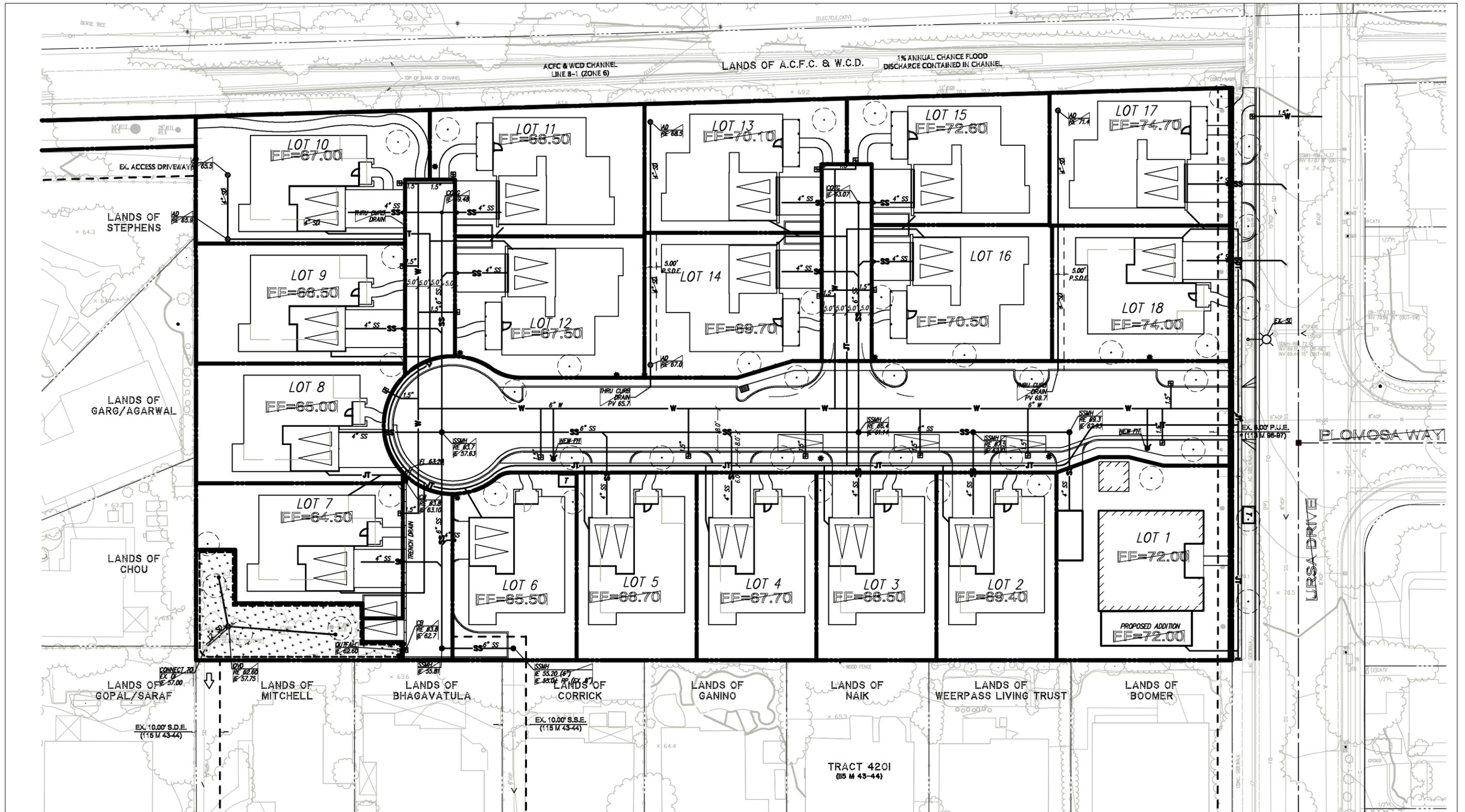
**LEFT ALTERNATE**

SCALE: 1/4" = 1'-0"

**NOTE:**  
ALTERNATE PLAN  
ONLY OCCURS ON  
LOTS 14 & 16

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The proposed project would include site grading to prepare the site for the proposed development. Approximately 850 cubic yards of shallow soils (less than three feet depth) impacted by lead and other potentially hazardous chemicals would be excavated, off hauled, and disposed in accordance with applicable laws (“soil remediation”). The civil engineer’s preliminary estimate of site grading is 2,800 cubic yards (CY) of cut and 1,500 CY of fill. An additional 2,000 CY is expected to be generated from the footing and trench excavation. Approximately 3,300 CY of material is anticipated to be exported from the site during site preparation and project construction. The existing water well would be properly destroyed in accordance with Alameda County Water District requirements.

Heavy vehicles (i.e., haul [tractor-trailer] trucks, machinery) would primarily access the project site via a construction entrance off Warm Springs Boulevard unless construction activities preclude such use. Other site access would occur from Ursa Drive. In addition to off-haul trips, vehicular trips would be generated by an estimated maximum of 50 construction employees on the site at any one time. Parking for construction workers would be on-site until such time that construction of foundations, buildings, and streets eliminate on-site parking, at which time the parking would shift to on-street parking in the project vicinity. There would be no multi-day staging of vehicles or equipment on or along existing roadways.

## 2.7.2 Construction Schedule and Phasing

Construction activities would typically occur during the work week, Monday through Friday, between 7:00 a.m. and 4:00 p.m. Any construction activities outside of these hours, if necessary, would comply with Fremont Municipal Code requirements for construction activities, which are 7:00 a.m. to 7:00 p.m. on weekdays, and 9:00 a.m. to 6:00 p.m. on Saturdays (FMC, Section 18.160.010). There would likely be multiple destinations for off-haul materials. Construction workers would also be arriving from different directions. Travel routes for workers, soils export, and material import would be determined in consultation with the City Public Works Department.

The proposed project construction would commence with site work, including tree removal; demolition; well destruction; excavation of pesticide, lead, and petroleum hydrocarbon impacted soils; grading; and installation of access roads and utility infrastructure. The residential construction would follow and overlap with some of the site work. Project construction is expected to last 20 to 24 months, commencing in June 2018 with completion in June 2020. This project schedule is dependent on market conditions, regulatory approvals, and other factors and, therefore, is subject to change.

## 2.8 Standard Development Requirements

The City of Fremont has established standard development requirements to address resource protection (FMC Chapter 18.218). These requirements apply to air quality (construction-related emissions), biological resources (special-status species), and cultural resources (notification of affiliated California Native American Tribes and accidental discovery of cultural resources).

The proposed project would comply with these standard development requirements, which are described in greater detail in the relevant topical area of the Initial Study (see Sections 4.3, Air Quality; 4.4, Biological Resources; and 4.5, Cultural Resources).

## 2.9 Project Approvals

The project is a private development proposal that involves private funds (no City, State, or federal funds). The approvals that would require discretionary actions by the City include:

- Preliminary and Precise Planned District Rezoning (includes Design Review)
- Vesting Tentative Tract Map
- Private Street
- Lot Line Adjustments

- Tree Removal Permit
- Grading Permit

The project would be reviewed and discussed at public hearings before the Historic Architectural Review Board (HARB), Planning Commission, and City Council.

The project may also require permits and/or approvals from the following agencies:

- Alameda County Flood Control and Water Conservation District
- Alameda County Water District
- Alameda County Department of Environmental Health
- Union Sanitary District
- State Department of Toxic Substances Control (DTSC)

### 3. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |                                                           |                                                                           |                                                           |
|-----------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Aesthetics                       | <input type="checkbox"/> Agriculture Resources                            | <input type="checkbox"/> Air Quality                      |
| <input type="checkbox"/> Biological Resources             | <input checked="" type="checkbox"/> Cultural Resources                    | <input type="checkbox"/> GHG Emissions/<br>Climate Change |
| <input type="checkbox"/> Hazards & Hazardous<br>Materials | <input type="checkbox"/> Hydrology / Water<br>Quality                     | <input type="checkbox"/> Geology / Soils                  |
| <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                                            | <input type="checkbox"/> Land Use / Planning              |
| <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                                       | <input type="checkbox"/> Population / Housing             |
| <input type="checkbox"/> Utilities / Service<br>Systems   | <input checked="" type="checkbox"/> Mandatory Findings of<br>Significance | <input type="checkbox"/> Transportation /<br>Traffic      |

### ENVIRONMENTAL DETERMINATION

On the basis of this Initial Study, the City of Fremont finds:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kristie Wheeler  
 Signature  
 City of Fremont

6/20/17  
 Date

Planning Manager  
 Title

Kristie Wheeler  
 Printed Name

## 4. Environmental Checklist

### 4.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1.a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.b. Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Setting:

The City of Fremont is located on the east side of the San Francisco Bay with the Mission Hills to the east, Union City to the north, and Milpitas to the south. Fremont is characterized as a large, mostly developed suburban community with residential areas mainly located in the eastern portion of the City and industrial and regional commercial areas located in the western portion of the City, along Interstate 880 (I-880). The project site is located in the southern portion of the City of Fremont on 2.67 acres that were previously part of a larger farm complex/orchard. The site is bound by an Alameda County Flood Control District channel along the north, Ursa Drive to the east, residential houses to the south and west. The surrounding area is urbanized, containing mainly modern detached one- and two-story single-family residences.

The 2.67-acre project site is rectangular in shape with a “panhandle” extending west to Warm Springs Boulevard providing vehicular access to the site. The project site is relatively flat, sloping gently towards the west. The project site contains a historic single-family home, tankhouse, barn, and other accessory structures, which are remnants of a larger 12.35-acre fruit farm. The existing house is in a state of disrepair and the barn and the majority of the accessory structures are dilapidated and rusted. The project site includes many fruit trees in the orchard area (lemon, apricot, loquat, fig and almond), landscape trees (Peruvian pepper, black walnut, juniper and tree of heaven), and other ornamental vegetation in the areas around the house. The remaining areas of the project site include invasive grasses and weeds. Visibility of the project site from public vantage points is limited to a small portion of Ursa Drive and Plomosa Drive. The existing driveway “panhandle” strip of the project site is visible from the abutting portion of Warm Springs Boulevard.

#### Discussion:

##### 1a), 1b) Less than Significant Impact.

Although there are no designated scenic vistas in the project vicinity, the Mission Peak Regional Preserve is located east of the project site and panoramic views of the project area occur from Mission Peak. These viewpoints are approximately three miles east of the project site and provide park visitors distant views of the site and the San Francisco Bay in the background. Distant views from Mission Peak overlook urban development, mostly residential development that is visually similar to the residential development proposed for the project site. Because of the distance of the project site from Mission Peak and the density of residential development in the project area, the new residential development on the project site would be indistinguishable from the surrounding area. Therefore, the proposed project would not substantially affect views from Mission Peak.

Approximately 1.7 miles from the site to the northeast is a 20-mile stretch of I-680 that has been designated by the California Department of Transportation (Caltrans) as a California Scenic Highway. The scenic stretch is located from Mission Boulevard in Fremont to the Contra Costa County line and provides views of wooded hillsides and valleys. The Fremont General Plan also identifies Mission Boulevard and the same portion of I-680 designated by Caltrans as a scenic corridor. Mission Boulevard is approximately 1.5 miles north of the project site. It is a wide boulevard that is lined with gas lamp-style street lights and landscaped with small trees and, on the west side, a line of taller palm trees along its sidewalks (City of Fremont, 2011).

Because of the surrounding residential development, the project site would not be visible from the scenic highway portion of I-680 nor from Mission Boulevard. Thus, impacts to scenic vistas or other scenic resources would be **less than significant**, and this impact will not be further addressed in the EIR.

### **1c) Less than Significant Impact.**

Implementation of the proposed project would noticeably alter the visual character of the project site. As discussed in Section 2, Project Description, the project proposes development of a 24-lot subdivision that would contain 18 single-family residences (17 new homes and relocation of the existing on-site home). One lot, in the southwest corner, would contain a biotreatment pond for on-site stormwater management. The existing house and tankhouse would be relocated to proposed Lot 1 in the southeast corner, with an addition to that house and new garage. The project would repair and repaint existing windows and doors, roof forms and exterior plaster finish, and replace some of the deteriorating doors and windows of the house. However, the architectural features of the house would be maintained.

The existing barn, garage, and fruit processing building would be demolished. The existing site access off Warm Springs Boulevard may be removed as part of the project and deeded to the abutting residential properties to the south. Alternatively, the driveway may be retained to provide private pedestrian access for the residential lots or possibly vehicular access for Lot 10 from Warm Springs Boulevard. New access to the proposed residences would be via a private cul-de-sac from Ursa Drive.

The project site is located in a largely developed suburban neighborhood comprised mostly of modern detached two-story single-family residences. The 17 new houses would also be modern detached two-story single-family residences (refer to Figures 2-10 and 2-11), of similar architectural style, height, and bulk as the surrounding community, and the proposed residential development on the project site would be generally consistent with the existing visual character of the surrounding area. There are two different plans for the proposed new houses, both of which have a maximum height of approximately 26 feet, and include a master balcony above the front entrance porch. Plan 2 has a boxier shape in the front, with a high gabled roof on one side of the house and four front pillars that create a larger porch space than Plan 1. Both plans have an attached two-car garage that is located to the side of the house opposite the gable roof and recessed slightly from the main building façade (Robert Hidey Architects, 2017). An alternate layout is proposed for the Plan 2 houses on internal corner lots, which includes French doors on the side of the house to provide additional visual interest. The two different house plans and varied unit orientation would create some visual variation with the project.

All existing trees would be removed as part of the project. Approximately 41 trees, including 16 *Pistacia chinenses* and several other species, would be planted as part of the project, following construction, consistent with the requirements of the City's Tree Preservation Ordinance. Each residential lot would likely include ornamental landscaping, such as shrubs, plants and flowered areas, and low-medium water-use landscaping in front yards, and within the bioretention basin. New trees and landscaping would provide screening for adjacent properties and generally contribute to the visual character of the site's interior and exterior appearance.

In summary, the proposed project would alter the visual character of the project site by relocating the existing historic home and barn, demolishing the remaining on-site structures, and developing 17 new houses. The proposed project would, however, be similar to the height, massing, and scale of the existing development in the surrounding neighborhood. Therefore, the project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts related to the visual character

of the surrounding community would be **less than significant**, and this impact will not be further addressed in the EIR.

**1d) Less than Significant Impact.**

The project site is located in an urbanized environment and is surrounded by existing sources of light and glare. These sources of light and glare include streetlights, exterior lighting on commercial and residential buildings, illuminated signage, reflective building material, vehicular headlights, and two major freeways (I-680 and I-880). The light and glare created by the proposed project would be consistent with the levels of lighting and glare currently emitted by development surrounding the project site, which are typical of a developed urban area. The project would comply with residential standards that require diffused exterior lighting to reduce visual impacts on adjacent properties. Thus, the project's impacts related to light and glare would be **less than significant**, and this impact will not be further addressed in the EIR.

**References:**

California Department of Transportation, nd. Alameda County. Officially Designated Scenic Highway Map. Available: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/). Accessed: April 17, 2017.

City of Fremont, 2011. City of Fremont General Plan, Community Character Chapter 4. Prepared for the City of Fremont.

Robert Hidey Architects, 2016. 3D Plan Views. Prepared for the City of Fremont.

## 4.2 Agricultural and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**2a-2e) No Impact.**

The California Department of Conservation categorizes the project site and the surrounding areas as Urban and Built-up Land; therefore, these areas are not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), and are not subject to any Williamson Act contracts (California Department of Conservation, 2015; 2016). The project site is occupied by a ca. 1928 house, ca. 1905

barn, and outbuildings, which are remnants of a larger 12.35-acre fruit farm and does not contain any forest or timberlands. The project site is currently zoned an R-1-6 (Single-Family Residential) District, and would be rezoned to a Planned District under the proposed project. As a result, the project would not convert any farmland to non-agricultural use, convert any forest land to non-forest use, or conflict with existing agricultural or timberland zoning. Construction or operation of the proposed project would, therefore, have **no impact** on agricultural and forest resources, and these impacts will not be further addressed in the EIR.

#### References:

California Department of Conservation, 2015. Alameda County Williamson Act FY 2014/2015. Available at [ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Alameda\\_14\\_15\\_WA.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Alameda_14_15_WA.pdf). Accessed April 24, 2017.

\_\_\_\_\_, 2016. Alameda County Important Farmland. Available at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ala14.pdf>. accessed April 5, 2017.

City of Fremont, 2016, Zoning Districts: Brief summation, Available at <https://fremont.gov/DocumentCenter/Home/View/2031>, accessed April 6, 2017

### 4.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.d. Expose sensitive receptors to substantial pollutant concentrations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Setting:

The project site is located within the City of Fremont in Alameda County, under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The project includes development of a 2.67-acre low density residential parcel within the Warm Springs Community Plan Area of the Fremont General Plan.

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

BAAQMD monitors air quality within Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of Solano and Sonoma Counties in the San Francisco Bay Area Air Basin (SFBAAB). Local climatological effects, including wind speed and direction, temperature,

inversion layers, and precipitation and fog, can exacerbate air quality problems in the SFBAAB. The climate of the SFBAAB is characterized by warm, dry summers and mild winters.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); sulfur dioxide (SO<sub>2</sub>); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM<sub>10</sub>) and PM equal to or less than 2.5 micrometers in diameter (PM<sub>2.5</sub>). Because the air quality standards for these air pollutants are regulated using human and environment health based criteria, they are commonly referred to as “criteria air pollutants.”

Areas are classified under the Federal Clean Air Act and California Clean Air Act as attainment, non-attainment, or maintenance (previously non-attainment and currently attainment) for each criteria pollutant based on whether the federal and state air quality standards have been achieved. With respect to federal standards, the SFBAAB is designated as a nonattainment area for ozone and PM<sub>2.5</sub>, and as an attainment or unclassified area for all other pollutants. With respect to the state standards, the SFBAAB is designated as a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, and as an attainment area for all other pollutants.

#### **Discussion:**

##### **3a) Less than Significant Impact.**

Air quality plans describe air pollution control strategies to be implemented by a city, county, or region. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with the requirements of the Federal Clean Air Act and California Clean Air Act requirements. BAAQMD prepares plans to attain state and national ambient air quality standards in the SFBAAB. BAAQMD adopted the *2017 Clean Air Plan: Spare the Air, Cool the Climate* on April 19, 2017 (BAAQMD, 2017). This plan provides a regional strategy to attain state and federal air quality standards by reducing ozone, PM, and toxic air contaminants (TACs).

Air quality plans identify potential control measures and strategies, including rules and regulations that could be implemented to reduce air pollutant emissions from industrial facilities, commercial processes, on- and off-road motor vehicles, and other sources. BAAQMD implements these strategies through rules and regulations, grant and incentive programs, public education and outreach, and partnerships with other agencies and stakeholders.

Projects that are consistent with the assumptions used in development of the air quality plan are considered to not conflict with or obstruct the attainment of air quality levels identified in the plan. Assumptions for emission estimates are based on population, employment, and land use projections taken from local and regional planning documents. As discussed in more detail in Section 4.10, Land Use and Land Use Planning, the proposed project would be consistent with the City's General Plan Low Density Residential land use designation. Because the proposed project would develop residential units consistent with the development assumptions for land uses and vehicle trips associated with the General Plan land use designation of the site, the intensity of operational emissions has been accounted for in the air quality plan.

Consistency with the air quality plan is also determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the national ambient air quality standards. The BAAQMD CEQA Air Quality Guidelines include thresholds of significance that are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on BAAQMD's ability to reach attainment (BAAQMD, 2017).

Emissions that are above these thresholds have not been accommodated in the air quality plans and would not be consistent with the air quality plans. As discussed in Item 3b below, project-related construction and operational criteria pollutant emissions would not exceed BAAQMD significance

thresholds. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be **less than significant** and will not be further addressed in the EIR.

### 3b) Less than Significant Impact.

The BAAQMD CEQA Air Quality Guidelines are for informational purposes only and should be followed by local governments at their own discretion (BAAQMD, 2017). The CEQA Air Quality Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or the air district to any specific course of regulatory action. The thresholds for criteria pollutants were developed through a quantitative examination of the efficacy of fugitive dust mitigation measures and a quantitative examination of statewide non-attainment emissions and are used for the analysis of project-generated emissions.

#### Construction

Construction of the proposed project would result in the temporary generation of reactive organic gases (ROG), nitrogen oxides (NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from soil excavation and material transport. ROG and NO<sub>x</sub> emissions are primarily associated with mobile equipment exhaust. Fugitive dust emissions are primarily associated with site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site.

The 2.67-acre parcel would involve the new development of 17 single-family residences, relocation and rehabilitation of an existing historic home and tankhouse, and demolition of accessory structures such as a barn and several sheds. The analysis provided here conservatively included the relocation and rehabilitation of the existing home in the dwelling unit count for the new development. The construction period for the proposed project would last up to 24 months. The analysis assumed eight-hour working days with an average of 30 workers on-site at a time.

Construction-related emissions associated with typical construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.1. CalEEMod allows use of project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. The total criteria pollutant construction emissions for the project are presented in Table 4.3-1. Additional modeling assumptions and details are provided in Appendix A.

**Table 4.3-1**  
**Ursa Residential Project Construction Emissions**

Emission Sources	ROG	NO <sub>x</sub>	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust
Total Emissions (tons)	1.06	8.05	0.33	0.32
Average Daily Emissions (lbs/day) <sup>a</sup>	4.00	30.47	1.26	1.21
Threshold of Significance <sup>b</sup>	54	54	82	54
Exceeds Threshold	No	No	No	No

Source: Modeled by AECOM in 2017.

Notes:

<sup>a</sup> Average Daily Emissions are calculated based on 22 working days per month over a 24 month construction period.

<sup>b</sup> Thresholds from Table 2-1 of the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017)

lbs/day = pounds per day

NO<sub>x</sub> = oxides of nitrogen

PM<sub>10</sub> = particulate matter with aerodynamic diameter less than 10 microns

PM<sub>2.5</sub> = particulate matter with aerodynamic diameter less than 2.5 microns

ROG = reactive organic gases

As shown in Table 4.3-1, construction-generated emissions of ROG, NO<sub>x</sub>, PM<sub>2.5</sub> exhaust, and PM<sub>10</sub> exhaust would not exceed applicable emission thresholds of significance. BAAQMD does not have quantitative emission thresholds for fugitive dust. Instead, BAAQMD recommends that all projects, regardless of the level of average daily emissions, implement applicable best management practices (BMPs), including those listed as Basic Construction Measures in the BAAQMD CEQA Guidelines (BAAQMD, 2017).

As discussed in Section 2.8 above, the project would comply with the City of Fremont's standard development requirements for resource protection (FMC Chapter 18.218), including the following requirements relating to construction-related emissions, which are based on BAAQMD's Basic Construction Measures, and would reduce construction-related fugitive dust and exhaust emissions:

**Construction-Related Emissions.** *The following construction measures, as periodically amended by BAAQMD, are required for all proposed development projects to reduce construction-related fugitive dust and exhaust emissions:*

- (A) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times daily.*
- (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 shall be limited to 15 miles per hour.*
- (E) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.*
- (F) Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.*
- (G) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.*
- (H) A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number also shall be visible to ensure compliance with applicable regulations.*

Because the above requirements apply to the proposed project, per FMC Section 18.218.050(a)(1), the proposed project would be consistent with BAAQMD guidance and would not result in the generation of significant fugitive dust emissions. Thus, construction of the proposed project would not violate or contribute substantially to an existing or projected air quality violation. The impact would be **less than significant** and will not be addressed further in the EIR.

### Operation

Operational emissions following construction of the proposed project would be generated by area, energy, and mobile sources. Area sources would include consumer products, periodic architectural coatings, and landscape equipment for residential land uses. Energy sources would include natural gas combustion for space and water heating in residences. Mobile sources would involve vehicle trips associated with residential activities (e.g., work, shopping, and other trips). Operational emissions were calculated using CalEEMod Version 2016.3.1.

Table 4.3-2 presents the proposed project's average daily operational emissions and maximum annual emissions in tons/year. Refer to Appendix A for a detailed summary of the CalEEMod modeling assumptions, inputs, and outputs.

**Table 4.3-2**  
**Ursa Residential Project Operational Emissions**

Emission Sources	Average Daily Emissions (lbs/day)				Maximum Annual Emissions (tons/year)			
	ROG	NO <sub>x</sub>	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust	ROG	NO <sub>x</sub>	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust
Total Emissions	1.58	2.58	0.72	0.72	0.20	0.39	0.01	0.01
Threshold of Significance <sup>a</sup>	54	54	82	54	10	10	15	10
Exceeds Threshold	No	No	No	No	No	No	No	No

Source: Modeled by AECOM in 2017.

Notes:

<sup>a</sup> Thresholds from Table 2-1 of the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017)

lbs/day = pounds per day

NO<sub>x</sub> = oxides of nitrogen

PM<sub>10</sub> = particulate matter with aerodynamic diameter less than 10 microns

PM<sub>2.5</sub> = particulate matter with aerodynamic diameter less than 2.5 microns

ROG = reactive organic gases

As summarized in Table 4.3-2, the long-term operational emissions attributable to the proposed project would generate emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> that would not exceed the thresholds of significance. Because long-term operational emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would not exceed the thresholds of significance, the proposed project would not violate or contribute substantially to an existing or projected air quality violation. Consequently, operational air emission impacts would be **less than significant** and will not be further addressed in the EIR.

### 3c) Less than Significant Impact.

By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and this regional impact is cumulative rather than attributable to any one source. Per CEQA Guidelines Section 15064(h)(4), the existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project does not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less-than-significant air quality impacts on the region's existing air quality conditions.

Based on the project-level analysis described above in Item 3b, the proposed project's construction and operational emissions would not exceed the thresholds of significance. Therefore, emissions associated with the proposed project would not be cumulatively considerable, and would result in a **less than significant** cumulative impact. This impact will not be addressed further in the EIR.

### 3d) Less than Significant Impact.

#### Construction

According to BAAQMD, if a project is likely to be a place where people live, play, or convalesce or if sensitive individuals are likely to spend a significant amount of time there, it should be considered a

receptor (BAAQMD, 2017). Sensitive individuals refer to those segments of the population most susceptible to poor air quality: children, the elderly, and those with pre-existing serious health problems affected by air quality. Examples of receptors include residences, schools and school yards, parks and play grounds, daycare centers, nursing homes, and medical facilities.

The nearest sensitive receptors to the project site are the immediately adjacent single-family residences. The greatest potential for TAC emissions during construction of the proposed project would be related to diesel PM emissions generated by heavy-duty construction equipment. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 30-year exposure period (OEHHA, 2015). However, health risk assessments should be limited to the period/duration of emissions-generating activity. The duration for project construction would be approximately 20 to 24 months, which is only about six percent of the required exposure period for health risk assessments. Emissions would occur intermittently throughout the construction period and would not occur as a constant plume of emissions from the project site. In addition, the project schedule is dependent on market conditions, regulatory approvals, and other factors and, therefore, is subject to change. Given the construction schedule, varying buffer distances to the nearest sensitive receptors as construction moves across the project site, and the highly dispersive nature of diesel PM emissions, construction of the project would not expose sensitive receptors to substantial TAC concentrations. Implementation of the City's standard development requirements for construction-related emissions (FMC 18.218.050(a)(1), discussed under item 3b above) would also reduce diesel PM emissions during construction.

Construction emissions for the proposed project would not expose sensitive receptors to substantial pollutant concentrations. The construction-related impact would be **less than significant** and will not be further addressed in the EIR.

### Operation

Operation of the proposed project would involve residential land uses that would not be a substantial source of TAC and/or PM<sub>2.5</sub> emissions. Further, there are no identified sources of TAC within 1,000 feet of the proposed site (BAAQMD Stationary Source Screening Analysis Tool, Alameda, 2012). The closest source of TAC and/or PM<sub>2.5</sub> emissions would be I-680. ARB has published the *Air Quality and Land Use Handbook*, which recommends that projects avoid siting new sensitive land uses within 500 feet of a freeway and urban roads with 100,000 vehicles per day (ARB, 2005). This recommendation is based on studies that show a 70 percent decrease in PM emissions at 500 feet from freeways, which are continuous emission sources, and an 80 percent decrease at 1,000 feet from distribution centers (ARB, 2005). Studies also indicate that diesel PM emissions and the relative health risk can decrease substantially within 300 feet (ARB, 2005; Zhu et al., 2002). The project site is located approximately 775 feet west from I-680 and would be consistent with ARB recommendations for siting new sensitive land uses.

According to BAAQMD's Highway Screening Analysis Tool for Alameda County, the cancer risk approximately 750 feet west of I-680 would be 31.198 in a million, which is below both BAAQMD's suggested cumulative significance threshold of a cancer risk greater than 100 in a million, as well as the City of Fremont General Plan implementation measure 7-7.3B that establishes a threshold of review for infill residential development when located in areas exposed to health risk levels in excess of 100 additional incidents of cancer per million exposures. The Screening Analysis also estimates the PM<sub>2.5</sub> increase at this distance from I-680 to be 0.171 µg/m<sup>3</sup>, which is also below the BAAQMD's cumulative significance threshold of an ambient increase greater than 0.3.

Furthermore, the California Supreme Court determined in 2015 that CEQA does not require an analysis of how the existing environment might affect a project's future users or residents (*California Building Industry Association v. Bay Area Air Quality Management District* 62 Cal. 4<sup>th</sup> 369).

Operational emissions for the proposed project would not expose sensitive receptors to substantial pollutant concentrations. This operational impact would be **less than significant** and will not be further addressed in the EIR.

### 3e) Less than Significant Impact.

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities. The project would not be located in close proximity to any of these types of odor generating facilities.

Construction activities associated with the proposed project could result in short-term odor emissions from diesel exhaust associated with construction equipment. The proposed project would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. The land uses associated with the proposed project would be residential, which are not typically a generator of odor emissions. Therefore, the proposed project would not create objectionable odors affecting a substantial number of people. The impact would be **less than significant** and will not be further addressed in the EIR.

#### References:

- California Air Resources Board (ARB), 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Available online at <http://www.arb.ca.gov/ch/landuse.htm>. Accessed March 2017.
- Bay Area Air Quality Management District (BAAQMD), 2011. Highway Screening Analysis Tool. Available online at <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed May 2017.
- , 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards. Available online at <http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en>. Accessed May 2017.
- , 2017. California Environmental Quality Act Air Quality Guidelines. Available online at [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en). Accessed May 2017.
- California Department of Transportation (Caltrans), 2015. 2015 Traffic Volumes on California State Highways. Available online at [http://www.dot.ca.gov/trafficops/census/docs/2015\\_aadt\\_volumes.pdf](http://www.dot.ca.gov/trafficops/census/docs/2015_aadt_volumes.pdf). Accessed May 2015.
- Office of Environmental Health Hazard Assessment (OEHHA), 2015. Adoption of Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Available online at [http://www.oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://www.oehha.ca.gov/air/hot_spots/hotspots2015.html). Accessed May 2017.
- Zhu, Y., W. C. Hinds, S. Kim, and S. Shen, 2002. Study of Ultrafine Particles Near a Major Highway with Heavy-duty Diesel Traffic. *Atmospheric Environment*. 36:4323–4335.

## 4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.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 of U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.c. Have substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.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 impeded the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

The project site is located in a highly urbanized area of the City of Fremont, and is approximately two miles west of the Mission Peak Regional Preserve east of I-680. The site is surrounded by residential housing and roads without any corridor to an open space. The main area of the site is rectangular in shape, with a narrow strip extending to Warm Springs Boulevard. The Alameda County Flood Control District channel along the northern boundary of the site is a trapezoidal channel made from concrete with no riparian vegetation along its banks. The project site contains a house, tankhouse, barn, garage, and other ancillary structures. A paved asphalt driveway is within the narrow strip of the project site that extends to Warm Springs Boulevard.

Vegetation at the site includes many fruit trees in the orchard area (lemon, apricot, loquat, fig and almond), and other landscape trees (Peruvian pepper, black walnut, juniper and tree of heaven) within a ruderal grassland/weed lot. The grasses and weeds consist of species such as soft brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), oat grass (*avena barbata*), leporinum barley (*Hordeum murinum* ssp. *Leporinum*), Italian rye grass (*Festuca perennis*), field mustard (*Brassica rapa*) and wild radish (*Raphanus sativus*).

The ruderal grassland/weed lot, abandoned buildings and orchard at the project site provide habitat for numerous wildlife including western scrub jay (*Aphelocoma californica*), white-crowned sparrow (*Zonotrichia leucophrys*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), white tailed kite (*Elanus leucurus*), house finch (*carpodacus mexicanus*), common raccoon (*Procyon*

*litor*), and Botta's pocket gopher (*Thomomys bottae*). A variety of birds could nest in the numerous trees at the project site or in the abandoned buildings and structures on the property. The trees, buildings, and structures with their ledges, nooks, crannies, and cavities also provide potential roosting areas for bats.

A review of the California Natural Diversity Database (CNDDDB) was conducted to identify special-status plant and animal species and their habitats that have previously been recorded in the greater project vicinity. The CNDDDB search covered the Milpitas USGS 7.5 minute quadrangle and surrounding eight quadrangles, and identified 33 special-status plant species, 21 bird species, 11 invertebrate species, nine mammal species, and seven reptile and amphibian species.

A biological reconnaissance survey was conducted by AECOM biologists on April 11, 2017, to examine the project site for special-status plant and animal species and their habitats, and to document the existing plants and animals at the site. The project site was overgrown with non-native grasses and weeds, although portions of the grassland had been recently mowed to provide access. During the reconnaissance survey, no special-status plants were found at the project site, and the site did not have habitats conducive for special-status plants. A white tailed kite (a fully protected species) was observed perched on one of the walnut trees at the project site. With the exception of nesting areas and roosting areas for birds and bats, habitats supporting special-status plants or animals were not present at the site. In addition, no jurisdictional wetlands or waters of the U.S. were observed at the project site.

#### **Discussion:**

##### **4a) Less than Significant Impact.**

The proposed project could adversely affect, either directly or through habitat modification, special-status bird or bat species that nest or roost at the project site or within the nearby vicinity. In addition, migratory bird nests that are protected by the federal Migratory Bird and Treaty Act and Fish and Game Code Section 3503 could also be adversely affected directly by project activities. Implementation of the City of Fremont's standard development requirements relating to biological resources (FMC Section 18.218.050[b]) would avoid the adverse effects of the project to nesting birds or roosting bats by requiring preconstruction surveys during the appropriate seasons and when nests or roosts are detected, applying appropriate protective buffer zones, and monitoring. These protective measures would prevent bird and bat mortality and the loss of active nests and roosts. No other plant or wildlife species identified as a candidate, sensitive, or special-status species are expected to be adversely affected by the project. Further discussion of the potential for special-status species to occur on the project site, and potential impacts of the project, is provided below.

#### Plants

There were 33 special-status plant species identified in the CNDDDB search, many of which occur in specific habitat areas, such as serpentine grasslands, chaparral, coastal scrub, vernal pools, that do not occur at the project site. Project site maps and photos were reviewed to determine potential habitats that might be present at the project site, and the reconnaissance survey assessed the potential for occurrence of special-status plant species that occur in such habitats. However, the project site was overgrown with non-native grasses and weeds and did not have habitats conducive for special-status plants. During the reconnaissance survey, no special-status plants were found at the project site. It is unlikely for special status plant species to occur at the project site due to their absence during the survey and the absence of their habitat. Therefore, there would be **no impacts** on special-status plants in relation to construction or operation of the proposed project. This impact will not be discussed further in the EIR.

#### Reptiles and Amphibians

There were seven different species of reptile and amphibian special-status species identified in the CNDDDB search; and only one of these species (California tiger salamander) had occurrences within two miles of the project site. None of the special-status reptile or amphibian species identified by the CNDDDB search had suitable habitat present at the project site.

The California tiger salamander, a federal and state threatened species, occurs in upland grassland areas, usually within a 562 meter (0.35 mile) radius of a breeding pond. There were three CNDDDB

occurrences within two miles of the project site and one occurrence within 0.6 mile of the site. Despite the proximity of these occurrences, the poor habitat for this species on the project site and the lack of a corridor and connectivity to other habitats render it unlikely that this species would occur at the project site. California tiger salamanders require small mammal burrows for upland habitat and during estivation. No burrows were observed during the reconnaissance survey, the vegetation was overgrown and thick which would inhibit their movement, and there was no connectivity to a pond or potential breeding area.

During the reconnaissance survey, no special-status reptiles and amphibians or their habitats were found at the project site. There would be **no impacts** on special-status reptiles and amphibians in relation to construction or operation of the proposed project. This impact will not be discussed further in the EIR.

### Nesting Birds

Nesting habitat for birds and raptors is abundant at the project site. Birds could build nests in the trees, bushes, grasses, and within and against buildings and structures. One special-status bird species, the white tailed kite (a fully protected species), was observed perched on one of the walnut trees at the project site during the reconnaissance survey. No bird nests were observed at the project site during the reconnaissance survey; however, there were potential nesting places for birds throughout the project site. If an active nest were to be directly affected by project activities, the nest, eggs, chicks or adults could be harmed and/or the nest could become abandoned. These impacts would constitute potentially significant impacts of the proposed project. As discussed in Section 2.8 above, the project would comply with the City of Fremont's standard development requirements for resource protection (FMC Chapter 18.218), including the following requirements relating to nesting birds, which would prevent bird nests from being adversely affected by the project:

***Nesting Birds.*** *New development projects with the potential to impact nesting birds through tree or shrub removal shall implement the following measures prior to removal of any trees/shrubs, grading, or ground disturbing activities:*

- (A) *Avoidance.* *Proposed project construction activities shall avoid the bird nesting season (February 1st through August 31st) when possible.*
- (B) *Preconstruction Surveys.* *If construction activities are scheduled during the nesting season, a qualified biologist shall conduct a preconstruction survey to identify any potential nesting activity. The biologist shall determine the number and time frame (prior to construction) of surveys to be conducted.*
- (C) *Protective Buffer Zone(s).* *If the survey indicates the presence of nesting birds, protective buffer zones shall be established around the nests. The size of the buffer zone shall be recommended by the biologist in consultation with the CDFW depending on the species of nesting bird and level of potential disturbance.*
- (D) *Initiation of Construction Activities.* *The buffer zones shall remain in place until the young have fledged and are foraging independently. A qualified biologist shall monitor the nests closely until it is determined the nests are no longer active, at which time construction activities may commence within the buffer area.*

Because the above requirements apply to the proposed project, per FMC Section 18.218.050(b)(2), the impacts of project construction on nesting birds would be **less than significant**.

Once constructed, operation of the proposed project would have **no impact** on nesting birds because nests are not expected to be destroyed or adversely affected by ordinary operational activities. This impact will not be discussed further in the EIR.

### Burrowing Owls

Burrowing owls are a California Species of Special Concern, and the CNDDDB search identified three previous occurrences within 2.5 miles of the project site. Despite the nearby occurrences, burrowing owls are not expected to occur at the site. The reconnaissance survey did not identify any burrowing owls,

burrows, or other suitable habitat for burrowing owls at the project site. The project site contains perches in the form of trees, bushes, structures, and posts from which predatory birds could attack burrowing owls. It is, therefore, considered unlikely for burrowing owls to occur at the site. Furthermore, the City's standard development requirements include measures relating to burrowing owls (FMC Section 18.218.050(b)[1]); however, such measures are unnecessary for the proposed project because site conditions are not suitable for burrowing owls to be present. There would be **no impacts** on burrowing owls in relation to construction or operation of the proposed project. This impact will not be discussed further in the EIR.

### Bats

The CNNDDB search identified two bat species that are known to be present in the project vicinity, the pallid bat (*Antrozous pallidus*) and the Townsend's big eared bat (*Corynorhinus townsendii*), both of which are California species of special concern. No bats or signs of bat roosting were observed during the reconnaissance survey; however, bats could potentially roost in abandoned buildings, under the eaves, or in tree hollows at the project site. Due to the presence of roosting habitat at the project site, there is a potential for project construction activities to disturb active bat roosts, harm individual bats, or adversely affect maternal roosts and pups. These impacts would be potentially significant due to the potential for causing mortality. However, as discussed in Section 2.8 above, the project includes implementation of the City of Fremont's standard development requirements for resource protection, including the following requirements relating to bats, which would prevent bat roosts from being adversely affected during construction:

**Roosting Bats.** *New development with potential to impact special-status or roosting bat species through demolition of existing structures or removal of trees on-site shall conduct the following measures prior to demolition:*

- (A) *Preconstruction Surveys. A qualified biologist shall conduct a preconstruction survey during seasonal periods of bat activity (mid-February through mid-October) to determine suitability of structure(s) or trees as bat roost habitat.*
- (B) *Protective Buffer Zone(s). If active bat roosts are found on-site, a suitable buffer from construction shall be established per the biologist. The biologist shall determine the species of bats present and the type of roost.*
- (C) *Mitigation and Exclusion. If the bats are identified as common species, and the roost is not being used as a maternity roost or hibernation site, the bats may be evicted using methods developed by a qualified biologist. If special-status bat species are found present, or if the roost is determined to be a maternity roost or hibernation site for any species, then the qualified biologist shall develop a bat mitigation and exclusion plan to compensate for lost roost. The site shall not be disturbed until CDFW approves the mitigation plan.*

Because the above requirements apply to the proposed project, per FMC Section 18.218.050(b)(2), the impacts of project construction on bat species would be **less than significant**.

While potential bat roosting areas for both special-status bat species are present at the project site, the site does not have caves or mines, which are the preferred roosting habitat for Townsend' big eared bats. The site also does not contain any preferred foraging areas near riparian areas, and is surrounded by adjacent residential homes which make the habitat at the site less than ideal due to their sensitivity to disturbances. Therefore, due to the limited quantity and quality of habitat being affected by this project in comparison to the available habitat in nearby open habitats, the potential loss of bat habitat due to operation of the project would be **less than significant**. This impact will not be discussed further in the EIR.

### Fish, Invertebrates, Terrestrial Mammals

Suitable habitat at the project site does not exist for any of the special-status invertebrates or fish or other (non-bat) mammal species identified in the CNDDDB search. As a result, they would not be expected to occur at the project site, and there would be **no impacts** on special-status fish, invertebrates, or terrestrial

mammals in relation to construction or operation of the proposed project. This impact will not be discussed further in the EIR.

**4b), 4c) No Impact.**

The project site was surveyed for sensitive natural communities, riparian areas, and potential jurisdictional wetlands during the reconnaissance survey on April 11, 2017. None of these sensitive biological communities and habitats were identified during the survey and, therefore, none are expected to be affected by the project. Consequently, construction and operation of the project would have **no impact** on sensitive natural communities, riparian areas or federally protected wetlands. These impacts will not be discussed further in the EIR.

**4d) No Impact.**

The project is located in an area surrounded by urban development. No aquatic or terrestrial migratory corridors or nursery sites exist on the property or adjacent properties for wildlife movement. The project would not impede wildlife that currently exists in the developed areas surrounding the project site from moving to other surrounding areas. Construction and operation of the proposed project would, therefore, have **no impact** on the movements of migratory or resident wildlife or fish species. This impact will not be discussed further in the EIR.

**4e) Less than Significant Impact.**

The project site contains 112 existing trees, including privet, walnut, almond, apricot, lemon, buckeye, silk tree, fig, tree of heaven, loquat, juniper, and Peruvian pepper. All existing trees would be removed as part of the project. Approximately 41 trees would be replanted as part of the project. The City of Fremont has a Tree Preservation Ordinance (FMC Chapter 18.215), which requires a permit to allow removal of private trees that meet certain criteria identified in FMC Section 18.215.050. The criteria consider the location, size and species of the tree(s) proposed for removal. The applicant would comply with requirements of the Tree Preservation Ordinance and permit conditions to allow the removal of trees. The removal of protected trees is subject to requirements involving the planting of replacement trees or the payment of in-lieu fees to mitigate the removal of trees that cannot be replaced on-site due to land area constraints, in accordance with the mitigation requirements of the City's Tree Preservation Ordinance. Following construction, ongoing operation of the project would not be expected to result in further tree removal, but should tree removal be needed in the future, a tree removal permit from the City of Fremont would be required. As a result, impacts of project construction and operation in relation to conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would be **less than significant** and will not be discussed further in the EIR.

**4f) No Impact.**

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the project area. Thus, construction or operation of the proposed project would have **no impact** on or conflict with habitat conservation plans in the area. This impact will not be discussed further in the EIR.

**References:**

California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB), 2017. Data request for U.S. Geological Survey Milpitas 7.5 minute topographic quadrangle and eight surrounding quads. Accessed April 10, 2017.

City of Fremont, 2014. Tree Preservation Ordinance, Fremont Municipal Code.

Western Bat Working Group, 2005. Species Account for the Pallid bat. Accessed at [http://www.wbwg.org/species\\_accounts](http://www.wbwg.org/species_accounts).

Western Bat Working Group, 2005. Species Account for the Townsend's big eared bat. Accessed at [http://www.wbwg.org/species\\_accounts](http://www.wbwg.org/species_accounts).

## 4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5.a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.e. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(i). Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

The project site is a small parcel that had formerly been part of a larger farmstead. The project site contains a 1928 farmhouse, ca. 1905 barn, tankhouse, and other outbuildings, as well as remnant apricot and walnut orchards that were owned by the Silva family. The parcel is bounded by suburban residential developments to the west and south, a flood control channel to the north, and Ursa Drive to the east. The project site is situated at the foot of an alluvial fan and vegetation includes tall invasive grasses and ornamental vegetation in the gardens around the farmhouse. Scott Creek is approximately 3,000 feet to the southeast. An unnamed drainage was formerly situated south of the project site, but was channelized into the flood control channel to the north of the project site in the 1950s (U.S. Geological Survey, 1899; 1953; 1961).

A full historical context for the rural landscape within which the project site is located will be provided in the EIR.

### Ethnography

Ethnographic literature indicates that the project site is within the territory of the Alson tribe, who occupied the Fremont Plain of southwest Alameda County. Although precise territorial boundaries are not known,

the Alson may have controlled the area along the Bay shoreline from near today's Highway 84 south to Scott Creek, while the Tuibun were located just to the north (Milliken, 1995, cited in ESA 2014:4.A-4). The Alson tribe spoke a dialect of Ohlone, one of the five mutually unintelligible language families that existed within the San Francisco Bay Area that also included Bay Miwok, Plains Miwok, Patwin, and Wappo (Milliken, 1995:13).

### Records Search

A records search was conducted at the Northwest Information Center of the California Historical Resources Information System on April 11, 2017 (File No. 16-1578). Site records and previous studies of the project site and a 0.5-mile radius were reviewed. The National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the City of Fremont Register, and the Office of Historic Preservation Historic Properties directory data files were also reviewed.

The records search revealed that no studies had been previously completed and no resources had been previously recorded within the project site. Prior studies completed at the Silva farmstead (Woodruff and Rice, 2002; ARG, 2017) have not been submitted to the Northwest Information Center. Seventeen studies had been completed within a 0.5 mile radius and three resources had been previously recorded between 0.25 and 0.5 miles from the project site. These resources consist of two railroad alignments (primary resource numbers P-01-001783 and P-01-002190) and one historic-period farm (P-01-002172). Each resource was formally evaluated and found ineligible for listing on the NRHP. They were also found not to be historical resources for the purposes of CEQA. No archaeological resources have been previously identified within 0.5 miles of the project site.

### Sacred Lands File Search

On April 12, 2017, AECOM requested a Sacred Lands File (SLF) search and Native American contact list for the project site from the Native American Heritage Commission (NAHC). On April 17, 2017, the NAHC responded that the SLF search was "negative... [h]owever, the absence of site specific information in the SLF does not preclude the presence of cultural resources in any project area." Native American consultation pursuant to AB 52 is being completed by the City of Fremont.

### Survey Methodology

A pedestrian survey of the project site was conducted by an AECOM archaeologist on April 20, 2017. North to south transects spaced approximately 30 to 50 feet apart were walked across the entire project site. The dense vegetation (non-native grasses, etc.) within the project site limited ground surface visibility. Vegetation was periodically scraped away with a hoe to better view the ground surface and rodent burrow back dirt piles were closely inspected for indicators of archaeological deposits.

### Survey Results

No archaeological resources were identified during the survey. Two features associated with the historic-period built environment were identified during the pedestrian survey.

One feature, a brick drain (field recording number 20170420\_A), is 15 feet west of Ursa Drive and 50 feet southeast of the drying shed in the location of a demolished sulfur burning shed as identified in the Phase I Environmental Site Assessment (ESA) for the project (Ramboll, 2017:18). The drain is one foot in diameter and hexagonal in shape, with at least three courses of dry laid common bricks visible subsurface. Bricks on the northern half of the drain had collapsed into the feature. The exposed portion of the drain extended 1.5 feet below ground surface. Below this depth, the drain was filled with clayey soil that appeared similar to the surrounding native soil. No artifacts except for bricks and fragments of wood were visible in the feature. Field recording number 20170420\_A is associated with the apricot processing that occurred on the farm in the early twentieth century. After being cut and pitted, apricots were placed on trays and stacked in sulfur sheds as sulfur exposure allowed the dried apricots to maintain their color (ARG, 2017:9). The sulfured apricots were then placed outdoors to dry out, perhaps in the nearby open-sided drying shed (ARG, 2017:10).

The second feature is a concrete foundation (field recording number 20170420\_B) that was identified 12 feet north of the barn. This feature is identified as “conc.” on the project development plans dated December 2016 (Kier & Wright, 2016). This foundation, an approximately five foot by five foot poured concrete pad, was found in an area mapped as a “former debris and farm equipment storage area” in the Phase I ESA (Ramboll, 2017:18). Dense vegetation and tree cover obscures this location in historic-period aerials so that it is not clear if 20170420\_B is in the location of an outbuilding, or if it is part of a former debris pile and not *in situ*.

## Discussion:

### 5a) Potentially Significant Impact.

The proposed project would occur on a former orchard/residential property known as the “Silva House” that was previously found to possess sufficient significance and integrity to be considered a historical resource for the purposes of CEQA (Woodruff and Rice, 2002; ARG, 2017). Impacts to this historical resource resulting from construction and operation of the proposed project, including the relocation of the residence and tankhouse, and the removal of the barn, garage, processing shed, mixing shed, remnant orchard and vegetation, could be **potentially significant** and will be further analyzed in the EIR.

### 5b) Less than Significant Impact.

#### Construction

The project site is located on alluvial fan sediments that likely date to the latest Pleistocene, indicating the surficial landform within the project area is likely too old to contain buried prehistoric archaeological resources (Helley and Graymer, 1997). No prehistoric archaeological resources have been previously identified within the 0.5-mile records search radius, or were identified during the pedestrian survey.

As discussed under “Setting” above, two features associated with the historic-period built environment (associated with demolished structures at the Silva farmstead) were identified during the pedestrian survey. The first feature, a brick drain (field recording number 20170420\_A), was demolished within the last five years and aside from the partially collapsed drain, no architectural remnants of the sulfur burning shed remain. No artifacts were identified within the drain and it does not appear it was used for refuse disposal after abandonment. The feature is associated with the Silva family and the orchard they operated; however, based on observations during the pedestrian survey, its data potential is limited and it no longer retains sufficient integrity to be determined eligible for the CRHR under Criterion 4 or identified as a unique archaeological resource as defined by CEQA.

The context of the second feature, the concrete foundation (field recording number 20170420\_B), is unknown. Field recording number 20170420\_B appeared slightly displaced and may not be *in situ*. No artifacts were found in association with 20170420\_B. This feature is associated with the Silva family, but its function is unknown and its integrity has been severely diminished. Based on observations during the pedestrian survey, field recording number 20170420\_B no longer retains sufficient integrity to be determined eligible for the CRHR under Criterion 4 or identified as a unique archaeological resource as defined by CEQA.

It is unlikely that either field recording number 20170420\_A or 20170420\_B would be considered contributing features to the larger rural landscape that will be evaluated in the EIR. The lack of integrity for these minor features does not diminish the overall integrity of the landscape.

No additional archaeological resources were identified in the project area. However, the potential cannot be completely discounted that unidentified deposits or isolated artifacts may exist in the project area. Any additional historic-period archaeological resources that are identified within the project area would need to be considered as part of the larger rural landscape. Impacts of the proposed project on such unidentified resources could, therefore, be potentially significant. However, as discussed in Section 2.8 above, the project must comply with the City of Fremont’s standard development requirements (codified in the FMC Section 18.218.050), which include the following requirements relating to accidental discovery of cultural resources:

**Accidental Discovery of Cultural Resources.** *The following requirements shall be met to address the potential for accidental discovery of cultural resources during ground disturbing excavation:*

- (A) *The project proponent shall include a note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.*
- (B) *The project proponent shall retain a professional archaeologist to provide a preconstruction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing buried cultural resources, including significant prehistoric archaeological resources. The briefing shall discuss any cultural resources, including archaeological objects, that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the project proponent and archaeological team.*
- (C) *In the event that any human remains or historical, archaeological or paleontological resources are discovered during ground disturbing excavation, the provisions of CEQA Guidelines Sections 15064(e) and (f) requiring cessation of work, notification, and immediate evaluation shall be followed. (Ord. 27-2016 § 37, 12-6-16.)*

Because these requirements apply to the proposed project, per FMC Section 18.218.050(c)(2), the potential for encountering and disturbing known or unknown cultural resources during construction of the proposed project would be minimized. Impacts of project construction on archeological resources would, therefore, be **less than significant** and will not be further addressed in the EIR.

#### Operation

Operation of the proposed project, once constructed, would not require disturbance of additional areas outside of the construction footprint of the project. As such, project operation would have **no impact** on archeological resources and will not be further addressed in the EIR.

### **5c) Less than Significant Impact.**

#### Construction

Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the extensive volume of sedimentary rock deposits preserved worldwide and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life. Paleontological resource localities are those sites where the fossilized remains of extinct animals and/or plants have been preserved. Rock formations that are considered of paleontological sensitivity are those units that have yielded significant vertebrate or invertebrate fossil remains. These include, but are not limited to, sedimentary rock units that contain significant paleontological resources anywhere within its geographic extent.

The project site is underlain by Pleistocene alluvial fan deposits (Qpaf) that were eroded from the surrounding hills (Helley and Graymer, 1997). The maximum thickness of this deposit is approximately 165 feet. These Pleistocene alluvial deposits are locally known to contain fresh water mollusks and extinct late Pleistocene vertebrate fossils, which may be significant (Helley and Graymer, 1997:6-7). A records search at the University of California, Berkeley Museum of Paleontology's (UCMP) catalog was conducted to identify Pleistocene fossil localities in Alameda County (UCMP, 2017). A total of 1,292 fossil localities were identified in the search, although none appear to be within the project site.

Although no paleontological resources were identified within the project site or its immediate surroundings as a result of the background research or records search efforts, unidentified deposits may exist in the project area that could be adversely affected by the proposed project's ground-disturbing activities. Such deposits are unlikely given the limited depth of construction (generally three feet or less, except for

utilities) and the fact that only minor or shallow excavation may be involved in construction. However, the potential cannot be completely discounted that paleontological resources may exist at the project site; therefore, construction of the project could potentially cause significant impacts to paleontological resources. However, as discussed above, the project must comply with the City of Fremont's standard development requirements addressing the accidental discovery of cultural resources, which would also minimize the potential for encountering and disturbing known or unknown paleontological resources. Impacts of project construction on paleontological resources would, therefore, be **less than significant**, and will not be further addressed in the EIR.

#### Operation

Operation of the proposed project, once constructed, would not require disturbance of additional areas outside of the construction footprint of the project. As such, project operation would have **no impact** on paleontological resources and will not be further addressed in the EIR.

### **5d) Less than Significant Impact.**

#### Construction

Archival research conducted at the Northwest Information Center indicated that the project site does not contain any previously recorded Native American sites or historic-period archaeological sites. No evidence of human remains was encountered during field surveys of the project site. However, the potential cannot be completely discounted that human remains may exist in the project site. Construction of the proposed project could, therefore, potentially have a significant impact in relation to disturbance of human remains. However, as discussed above, the project must comply with the City of Fremont's standard development requirements addressing the accidental discovery of cultural resources, which would also minimize the potential for encountering and disturbing known or unknown human remains. Impacts of project construction relating to disturbance of human remains would, therefore, be **less than significant** and will not be further addressed in the EIR.

#### Operation

Operation of the proposed project, once constructed, would not require disturbance of additional areas outside of the construction footprint of the project. As such, project operation would have **no impact** in relation to disturbance of human remains and will not be further addressed in the EIR.

### **5e)(i), 5e)(ii) No Impact.**

#### Construction

No tribal cultural resources that are listed or eligible for listing in the CRHR or local register of historical resources were identified during background research at the NWIC or NAHC or during the archaeological field survey. However, records maintained by the NWIC and NAHC are not exhaustive and negative results do not preclude the presence of tribal cultural resources in the project site. As discussed in Section 2.8, above, the project would include implementation of the City of Fremont's standard development requirements (codified in FMC Section 18.218.050), which include the City's notification of Native American tribes that might have knowledge of tribal cultural resources within the project site:

***Notification, Affiliated California Native American Tribes.*** Prior to preparation of an environmental assessment and within 14 days of determining that an application for a project is complete, the City shall provide formal notification to the designated contact or a tribal representative of traditionally and culturally affiliated California Native American tribes that have requested to receive such notice from the city. The written notification shall include a brief description of the proposed project and its location, project contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to AB 52.

Notice of the proposed project was sent to the local California Native American Tribes named on the Native American Contacts list for Alameda County provided by the NAHC on April 12, 2017, to allow early consultation (City, 2017). No requests for such consultation were received by the City and no tribal cultural resources have been identified on the proposed site. Thus, no impact would result.

## Operation

Operation of the proposed project, once constructed, would not require disturbance of additional areas outside of the construction footprint of the project. As such, project operation would have **no impact** in relation to tribal resources and will not be further addressed in the EIR.

## **References:**

- Architectural Resources Group (ARG), 2017. Historic Resource Technical Report 48495 Ursa Drive, Fremont California. Prepared for Robson Homes, San José, California.
- City of Fremont (City), 2017. Re: Assembly Bill 52 Consultation for the Ursa Residential Project (Planning Application No. PLN2017-00188, 48495 Ursa Drive, APN: 519-1080-47). Sent to: Indian Canyon Mutsun Band of Costanoans, Torres Martinez Desert Cahuilla Indians, North Valley Yokuts Tribe, Amah/Mutsun Tribal Band, Costanoan Rumsen Carmel Tribe, The Ohlone Indian Tribe, Muwekma Ohlone Indian Tribe of the SF Bay Area, and Lone Band of Miwok Indians. April 12, 2017.
- Environmental Science Associates (ESA), 2014. Final Palmdale Estates Planned District Focused Environmental Impact Report. Prepared for the City of Fremont, California.
- Helley, E.J., and R.W. Graymer, 1997. Quaternary geology of Alameda County, and parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin Counties, California: A digital database: U.S. Geological Survey Open-File Report 97-97. Available online at: <https://pubs.usgs.gov/of/1997/0097/> Accessed April 19, 2017.
- Kier & Wright, 2016. Precise Planned Development Prepared for a 24 Lot Subdivision Tract No. 8384, 48495 Ursa Drive, City of Fremont, Alameda County, California. Prepared by Kier & Wright Civil Engineers and Surveyors, Santa Clara, California. Prepared for Robson Homes, San José, California.
- Milliken, Randall, 1995. A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-1810. Ballena Press, Menlo Park, California.
- Minor, Woodruff, and Ann Rice, 2002. Department of Parks and Recreation (DPR) 523 forms for Silva House, 48495 Ursa Drive/48416 Warm Springs Boulevard, Fremont, Alameda County, California. June 2002.
- Ramboll Environ US Corporation (Ramboll), 2017. Phase I Environmental Site Assessment and Shallow Soil Investigation, 48495 Ursa Drive/48416 Warm Springs Boulevard, Fremont, California. Prepared for Robson Homes, LLC, San José, California.
- U.S. Geological Survey (USGS), 1899. San Jose, Calif. 15-minute topographic quadrangle. USGS Historic Topographic Map Explorer. Available online at: <http://historicalmaps.arcgis.com/usgs/> Accessed April 19, 2017.
- \_\_\_\_\_, 1953. Milpitas, Calif. 7.5-minute topographic quadrangle. USGS Historic Topographic Map Explorer. Available online at: <http://historicalmaps.arcgis.com/usgs/> Accessed April 19, 2017.
- \_\_\_\_\_, 1961. Milpitas, Calif. 7.5-minute topographic quadrangle. USGS Historic Topographic Map Explorer. Available online at: <http://historicalmaps.arcgis.com/usgs/> Accessed April 19, 2017.

## 4.6 Geology, Soils, and Seismicity

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6.a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion:

#### 6a.i) Less than Significant Impact.

The project site is located along the East Bay Hills of the San Francisco Bay Area and is part of the California Coastal Mountain Range region, a mountain range that spans over 500 miles northwest. The Hayward Fault Line runs 74 miles northward along the base of the East Bay Hills to San Pablo Bay, and sits within 1,000 feet east of the project site (California Department of Conservation, 2008). The Hayward Fault is part of a network of active faults in the region including the San Andreas Fault to the west and the Calaveras Fault to the east. According to the United States Geological Survey (USGS), the Hayward Fault and the Calaveras Faults pose the highest threat of seismic activity in the San Francisco Bay Area (USGS, 2015). However, the project site is not located within the Alquist-Priolo Earthquake Fault Zone (California Division of Mines and Geology, 1982). The Alquist-Priolo Earthquake Fault Zoning Act restricts construction activity in known active and well defined fault zones likely to experience surface fault rupture. Because the project site is not located within the designated Alquist-Priolo Earthquake Zone, and is not located on or immediately adjacent to an active fault, construction or operation of the proposed project would have a **less-than-significant** impact in relation to fault rupture hazards. This impact will not be addressed further in the EIR.

#### 6a.ii) Less than Significant Impact.

The project site is located in a seismically-active region of California that is part of the Coast Ranges geomorphic province. This region is characterized by northwest trending valleys and mountain ranges

running sub-parallel to the San Andreas Fault Zone. The closest active fault to the project site is the Hayward Fault, which is located approximately 650 feet to the northeast. Other regional active faults include the Northern San Andreas Fault to the west and the Calaveras Fault to the east. According to the USGS forecast, both the Calaveras and Hayward Faults exceed a 6.7 percent likelihood of a 6.7 magnitude earthquake in the next 30 years and the Northern San Andreas Fault has a 6.4 percent chance of having one or more events larger than magnitude 6.7 in the next 30 years (USGS, 2015). In the event of an earthquake on any of these faults, the project site would experience a range of ground shaking effects, and depending on a variety of factors such as distance to the epicenter, magnitude of the event, and behavior of underlying materials, ground shaking could be significant. Earthquake strength and epicenters are unpredictable and may result in damage to surrounding roadways, utilities, and building foundations.

The project would be required to follow the seismic standards of the most recent version of the California Building Code, which includes measures to ensure that structures can withstand the maximum expected ground shaking without catastrophic failure. While complete avoidance of any damage may not be feasible, incorporation of industry-standard seismic design measures in accordance with current building codes would mean that potential impacts from strong seismic ground shaking would be less than significant. The project would not exacerbate the potential for seismic ground shaking, which is a function of the location of the epicenter, the size of the event, and the underlying geological formations, none of which would be affected by the proposed project. For this reason, construction and operational impacts of the project relating to seismic ground shaking would be **less than significant** and will not be addressed further in the EIR.

#### **6a.iii) Less than Significant Impact.**

The project site is not within an area identified by the State geologist as being subject to significant risk of liquefaction (California Geological Survey [CGS], 2004). The site-specific geotechnical investigation states that the subsurface soils generally consist of clays, which are not considered susceptible to liquefaction, and that liquefaction due to seismic activity is a low risk (Geo-logic Associates, 2017). Regardless, the proposed project would be required to follow the seismic standards of the most recent version of the California Building Code, which includes measures to ensure that potential settlement and resultant damage from liquefaction is minimized. While complete avoidance of any damage may not be feasible, incorporation of industry-standard seismic design measures in accordance with current building codes would reduce potential impacts from liquefaction and differential settlement to less-than-significant levels. Construction and operation of the proposed project would not exacerbate the potential for seismic liquefaction, which is a function of the location of the epicenter, the size of the event, and the underlying soils, none of which would be affected by the proposed project. For this reason, the construction and operational impacts of the project relating to liquefaction would be **less than significant** and will not be addressed further in the EIR.

#### **6a.iv) Less than Significant Impact.**

According to the Landslide Inventory Map of the Milpitas Quadrangle (Wigers, 2011), in which the project site is located, the project site is not classified as a historic or active landslide. The project site is flat, with a gentle down gradient from the northeast to southwest (Geo-Logic Associates, 2017). Because the site is not classified as a landslide, nor is it located in close proximity to a classified landslide, construction or operation of the project would have a **less-than-significant** impact relating to landslide hazards, and this impact will not be addressed further in the EIR.

#### **6b) Less than Significant Impact.**

##### Construction

Construction of the project would involve the demolition of existing structures (except for the existing house and tankhouse, which would be relocated), and the removal of trees to accommodate the development. The site would then be graded to form building pads and street and sidewalk grades followed by construction activities to build the new housing development. These activities have the potential to cause erosion and loss of topsoil. As discussed in Section 4.9, Hydrology and Water Quality, disturbances to the property would be greater than an acre, requiring coverage under the Statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activities Stormwater

Permit (General Permit) through the California State Water Resources Control Board (SWRCB). To obtain coverage under the General Permit, submission of a Storm Water Pollution Prevention Plan (SWPPP) would be required, which requires implementation of Best Management Practices to minimize erosion and topsoil loss.

With implementation of Best Management Practices required by the SWPPP under the NPDES General Permit, the potential construction impacts related to erosion and topsoil loss would be **less than significant** and will not be addressed further in the EIR.

#### Operation

Once constructed, the proposed project would be landscaped and/or covered in hardscape features; therefore, erosion or loss of topsoil would not be expected to continue beyond the construction period. There would be **no impact** related to erosion and topsoil loss from operation of the proposed project and will not be addressed further in the EIR.

#### **6c) Less than Significant Impact.**

According to the geotechnical investigation of the project site, the subsurface soils of the site are mostly clays (Geo-logic Associates, 2017). Because the site has undergone previous development, it is reasonable to assume there may be areas of deep and loose fill. If not designed appropriately, construction on relatively loose materials or over materials of differing properties could be subject to subsidence or differential settlement. However, the proposed project would be required to adhere to site preparation standards in accordance with the most recent California Building Code requirements, which include site specific design-level evaluation of underlying materials and their engineering characteristics. As such, the proposed project would be required to include site preparation such as removal of unsuitable materials and either recompacted or replaced with engineered fill. With implementation of industry standard engineering design measures in accordance with building code standards, the potential impacts associated with unstable soils would be reduced, and hazards associated with unstable soils would not be exacerbated by the project. Because adherence to applicable state building codes is required, the potential impact of project construction or operation relating to unstable soils would be **less than significant** and will not be addressed further in the EIR.

#### **6d) Less than Significant Impact.**

The geotechnical investigation revealed that the project site subsurface soils consist of clays that have high expansion potential (Geo-logic Associates, 2017). If not designed appropriately, construction on expansive soils could result in damage to proposed foundations as a result of changes in soil moisture. To mitigate this potential for soil expansion, the geotechnical investigation recommends use of non-expansive fill as a base layer before the preferred building foundation of post-tension slabs and other concrete are constructed. Other recommendations include moisture conditioning, controlled compaction of soils, and lime treatment of soils to reduce expansion potential. The recommendations of the geotechnical report have been reviewed and approved by the City's geotechnical engineer, and will be included as conditions of project approval as well as other requirements of applicable state building codes. These measures would reduce the potential for damage to foundations from expansive soils to a **less-than-significant** level. These impacts will not be addressed further in the EIR.

#### **6e) No Impact.**

The project site does not require the ability to support new septic tanks or alternative wastewater disposal. New stormwater, wastewater, and other utilities would be connected to existing utility infrastructure adjacent to the site. For these reasons, there would be **no impact** from construction or operation of the project in relation to septic tanks or alternative wastewater treatment systems. This impact will not be addressed further in the EIR.

#### **References:**

California Department of Conservation, 2008, Hayward Fault Fact Sheet, Available at <http://www.conservation.ca.gov/index/Pages/HaywardFaultFactSheet.aspx>, accessed April 11, 2017

California Division of Mines and Geology, 1982. Special Studies Zones, Milpitas Quadrangle. Revised Official Map, January 1, 1982. Available at <http://gmw.consrv.ca.gov/shmp/download/quad/MILPITAS/maps/MILPITAS.PDF>, accessed April 11, 2017

California Geologic Survey (CGS), 2004. Earthquake Zones of Required Investigation, Milpitas Quadrangle. Revised Official Map, October 19, 2004. Available at: [http://gmw.conservaion.ca.gov/SHP/EZRIM/Maps/MILPITAS\\_EZRIM.pdf](http://gmw.conservaion.ca.gov/SHP/EZRIM/Maps/MILPITAS_EZRIM.pdf), accessed April 24, 2017.

California Geologic Survey (CGS), 2011. Landslide Inventory Map of the Milpitas Quadrangle, Alameda and Santa Clara Counties, California. Available at [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/lslim/LSIM\\_Milpitas.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/lslim/LSIM_Milpitas.pdf), accessed April 11, 2017.

Geo-logic Associates dba Pacific Geotechnical Engineering, 2017, Geotechnical Investigation Proposed Residential Development, prepared for City of Fremont.

United States Geological Survey (USGS), 2015. UCERF3: A New Earthquake Forecast for California's Complex Fault System. March 2015. Available at <https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>, accessed April 11, 2017

## 4.7 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7.a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting:

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHG), play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the proposed project:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)

Emissions of CO<sub>2</sub> are byproducts of fossil fuel combustion. CH<sub>4</sub> is the main component of natural gas and is associated with agricultural practices and landfills. N<sub>2</sub>O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO<sub>2</sub>. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere (“atmospheric lifetime”). The reference gas for GWP is CO<sub>2</sub>; therefore, CO<sub>2</sub> has a GWP of 1. The other main GHGs that have been attributed to human activity include CH<sub>4</sub>, which has a GWP of 28, and N<sub>2</sub>O, which has a GWP of 265 (International Panel on Climate Change [IPCC], 2013). For example, one ton of CH<sub>4</sub> has the same contribution to the greenhouse effect as approximately 28 tons of CO<sub>2</sub>. GHGs with lower emission rates than CO<sub>2</sub> may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO<sub>2</sub> (i.e., high GWP). The concept of CO<sub>2</sub>-equivalents (CO<sub>2</sub>e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

## Discussion:

### 7a) Less than Significant Impact.

The impacts associated with GHG emissions generated by the proposed project are related to the emissions from construction and operation. Off-road equipment, materials transport, and worker commutes during construction of the proposed project would generate GHG emissions. Building operation, energy use, and mobile sources from vehicle trips by residents would also generate GHG emissions. Total project construction and operational GHG emissions were estimated using the methodology discussed earlier under Section 4.3, Air Quality. As shown in Table 4.7-1, the total estimated construction-related emissions would be approximately 1,410 metric tons (MT) CO<sub>2</sub>e with the maximum emissions of 777 MTCO<sub>2</sub>e in 2019. Additional modeling assumptions and details are provided in Appendix A.

**Table 4.7-1**  
**Ursa Residential Project GHG Construction Emissions**

Emissions	Proposed Project (MTCO <sub>2</sub> e/year)
2018	312
2019	777
2020	321
<b>Total Construction Emissions</b>	<b>1,410</b>

Source: Modeled by AECOM in 2017

Note:

MT = metric tons

CO<sub>2</sub>e = carbon dioxide equivalents

Detailed modeling outputs provided in Appendix A.

BAAQMD has not adopted thresholds for evaluating GHG emissions from construction activities. However, BAAQMD recommends that the lead agency quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting Assembly Bill (AB) 32 GHG reduction goals (BAAQMD, 2017).

Direct comparison of construction GHG emissions with long-term thresholds would not be appropriate because these emissions cease upon completion of construction. Other districts (e.g., South Coast Air Quality Management District, 2008; San Luis Obispo County Air Pollution Control District, 2012) recommend that GHG emissions from construction activities be amortized over a project’s operational lifetime (typically assumed to be 30 years) for comparison with long-term GHG emissions significance thresholds. For comparison to the BAAQMD threshold, construction emissions were amortized over the

lifetime of the project and added to the annual operational emissions (see Table 4.7-2). The amortized construction emissions for the proposed project were estimated at 47 MT CO<sub>2</sub>e per year<sup>1</sup>.

For operational-related GHG emissions of a land use development, such as the proposed project, BAAQMD recommends a threshold of significance of less than 1,100 MT CO<sub>2</sub>e MT per year or 4.6 MT CO<sub>2</sub>e per service population (defined as number of residents plus employees) per year. Operational GHG emissions include area emissions, energy demand, vehicle trips, waste, and water usage. Estimated operational GHG emissions for the proposed project are shown in Table 4.7-2. Additional modeling assumptions and details are provided in Appendix A.

**Table 4.7-2**  
**Ursa Residential Project GHG Operational Emissions**

Emissions Source	Proposed Project (MTCO <sub>2</sub> e)
Amortized Construction Emissions	47
Total Annual Operational Emissions	297
Total Annual Project GHG Emissions <sup>a</sup>	344
Threshold of Significance	1,100

Source: Modeled by AECOM in 2017.

Note:

<sup>a</sup> Total project GHG emissions include annual operational emissions and amortized construction emissions.

MT = metric tons

CO<sub>2</sub>e = carbon dioxide equivalents

Detailed modeling outputs provided in Appendix A.

As shown in Table 4.7-2, total annual GHG emissions were estimated at approximately 344 MT CO<sub>2</sub>e per year. Annual project GHG emissions would not exceed the BAAQMD threshold of 1,100 MT CO<sub>2</sub>e per year. Therefore, the proposed project would not generate GHG emissions that may have a significant impact on the environment. The impact would be **less than significant** and will not be further addressed in the EIR.

#### **7b) Less than Significant Impact.**

In 2006, California passed the *California Global Warming Solutions Act of 2006* (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. It requires that statewide GHG emissions be reduced to 1990 levels by 2020.

In December 2008, ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32 (ARB, 2008). In 2014, ARB approved the first update to the *Climate Change Scoping Plan: Building on the Framework* (ARB 2014). In 2016, the state legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, ARB released a proposed scoping plan on January 21, 2017. The proposed 2017 Scoping Plan has not been adopted at the time of this analysis.

None of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. In addition, it is assumed that any requirements formulated under the mandate of AB 32 and SB 32 would be implemented consistent with statewide policies and laws.

<sup>1</sup> 1,410 MT CO<sub>2</sub>e divided by 30 years equals 47 MT CO<sub>2</sub>e per year.

In 2012, the City of Fremont adopted the *Fremont Climate Action Plan* (CAP) to address the major sources of GHG emissions to meet the emission reduction goal of 25 percent below Fremont's 2005 conditions by 2020 (City of Fremont, 2012). To meet this goal, the City adopted community-wide measures to reduce emissions in the following sectors: land use and mobility, energy, solid waste, water, and municipal services and operations.

As indicated in the CAP, the Fremont City Council adopted an ordinance, effective January 1, 2011, which mandates that new residential buildings comply with the Green Building Code, or, alternately, achieve at least fifty points from the GreenPoint Checklist (City of Fremont, 2012). Since adoption of the CAP, the City of Fremont has also adopted an ordinance and amendments to FMC Chapter 15.48, Fremont Green Building Standards Code, related to implementation of the 2016 California Green Building Standards Code (CALGreen). The 2016 CALGreen requirements include mandatory measures for all new building construction, and the CALGreen Residential Mandatory Measures checklist must be included on a plan sheet for all projects subject to these measures (City of Fremont, 2017). The CAP does not include any additional measures that are directly applicable to the proposed project.

Based on the proposed project's required adherence to the City's Green Building Ordinance, the proposed project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Therefore, the impact would be **less than significant** and will not be further addressed in the EIR.

#### References:

- Bay Area Air Quality Management District (BAAQMD), 2017 California Environmental Quality Act Air Quality Guidelines. Available online at [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en). Accessed May 2017.
- California Air Resources Board (ARB), 2008. Climate Change Scoping Plan. [www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm](http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm). Accessed May 2017.
- , 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. Pursuant to AB 32, the California Global Warming Solutions Act of 2006. Available online at [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf). Accessed May 2017.
- , 2017. The 2017 Climate Change Scoping Plan Update. Available online at [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_pp\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf). Accessed May 2017.
- City of Fremont, 2012. Fremont Climate Action Plan. Available online at <https://fremont.gov/DocumentCenter/View/19837>. Accessed April 2017.
- , 2017. Green Building. Available online at <https://fremont.gov/2173/Green-Building>. Accessed May 2017.
- Intergovernmental Panel on Climate Change (IPCC), 2013. Climate Change 2013: The Physical Science Basis. Available online at <http://www.ipcc.ch/report/ar5/wg1/>. Accessed April 2017.
- San Luis Obispo County Air Pollution Control District (SLOAPCD), 2012. CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review. April 2012. Available online at [http://www.slocleanair.org/images/cms/upload/files/CEQA\\_Handbook\\_2012\\_v1.pdf](http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf). Accessed April 2017.
- South Coast Air Quality Management District (SCAQMD), 2008. Interim CEQA GHG Threshold for Stationary Sources, Rules, and Plans. Available online at [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2) Accessed April 2017.

## 4.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8.a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8d. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.f. For a project within the vicinity of a private airstrip, would the project result in safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8.h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting:

The project site is part of a former orchard, with limited paved areas, outbuildings, and access roads made of hard-packed dirt and gravel. The existing structures on-site pre-date the federal ban on use of asbestos-containing materials (ACM) and lead-based paint (LBP) and, therefore, likely contain these hazardous building materials.

Soils are primarily clays and the site is flat, with a slight grade to the southwest. A groundwater well is located west of the on-site tankhouse. This well was previously used for potable water and for irrigation of the orchard. Groundwater monitoring reports for nearby properties indicate that depth to groundwater ranges between approximately 14 and 24 feet below ground surface and that shallow groundwater flows to the west or west-southwest (Ramboll, 2017).

There is evidence of historic contamination at the site (Ramboll, 2017). The Phase I/Phase II Environmental Site Assessment and Shallow Soil Investigation (Phase I/Phase II) found localized areas of shallow soil with lead, organochlorine pesticides (chlordane and p,p-dichlorodiphenylethylene [p,p-DDE]),

and total petroleum hydrocarbons (fuels) at concentrations above regulatory screening levels for residential land use<sup>2</sup>. The areas of elevated lead and fuels were generally in locations of stained soil, areas where vehicles or farm equipment were historically stored, and/or at the base of structures where soils could have been impacted by lead-based paint. Higher levels of organochlorine pesticides were located in the same areas (Ramboll, 2017). Figure 4.8-1 shows the areas of the project site where soil samples were found to exceed applicable screening levels.

The Phase I/Phase II also sampled water from the existing on-site well and from the flooded basement of the on-site house. No chemicals of potential concern were detected in groundwater at levels exceeding the laboratory detection limits. The basement waters contained low levels of metals, oil, and grease which were generally below the relevant maximum contaminant levels<sup>3</sup>, while pesticides were not detected above laboratory reporting limits. The Phase I/Phase II concluded that the low levels of contaminants in the basement water were “not of concern if the water were to be pumped from the basement and allowed to infiltrate in the former orchard areas of the site” (Ramboll, 2017).

A site-wide magnetic investigation with potholing was conducted as part of the environmental site investigation, due to the possible presence of a septic tank and an underground storage tank. A septic tank was reportedly located in the existing driveway section of the site, and was reportedly used until approximately the 1980s, though it is unknown if the tank was removed or filled in place. The magnetic survey and ensuing potholing conducted in 2016 did not detect any septic tank (JR Associates, 2016). The magnetic survey also found no evidence of an underground storage tank, although an empty 250-gallon tank labeled “underground tank for flammable liquids” was observed aboveground in the former orchard portion of the site during the environmental investigation (Ramboll, 2017). This tank is believed to be the former underground storage tank that prompted the Phase I/Phase II. No details regarding the removal of this tank were identified in the Phase I/Phase II (Ramboll, 2017).

## **Discussion:**

### **8a), 8b) Less than Significant Impact with Mitigation Incorporated.**

#### Construction

Construction of the proposed project would require relocation and rehabilitation of the existing house and tankhouse, demolition of other existing structures, grading activities, and construction of new houses and associated infrastructure.

Demolition and rehabilitation activities could potentially expose construction workers and the public to hazardous conditions through disturbance of hazardous building materials, as all of the structures on the project site are of an age which makes them suspect for containing hazardous building materials such as ACM and LBP. If ACMs or LBP are present and disturbed during demolition or rehabilitation activities, they could expose workers and the public to potentially hazardous airborne asbestos fibers or lead dust.

Site grading activities could potentially expose construction workers and the public to hazardous conditions through disturbance, transportation, or disposal of contaminated soils, due to the confirmed presence of lead, pesticides, and petroleum hydrocarbons in shallow soils in some areas of the site from historical activities, at levels exceeding both residential land use and direct worker exposure environmental screening levels (refer to Figure 4.8-1). Grading activities could also result in accidental release of contaminants from the soil to groundwater or air.

Due to the use of typical construction equipment (e.g., gasoline or diesel powered machinery) and construction materials (solvents, adhesives, paints, etc.) during project construction, there is potential for accidental spills or releases of hazardous materials.

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<sup>2</sup> The soil sampling analytical results were compared to applicable federal Environmental Protection Agency Regional Screening Levels (RSLs) or California Department of Toxic Substances Control modified RSLs for residential land use with the exception of arsenic concentrations, which were compared to naturally-occurring background levels.

<sup>3</sup> The water sample analytical results were compared to applicable maximum contaminant levels (MCLs) established in California Code of Regulations Title 22 §64431, §64479, and §64678.

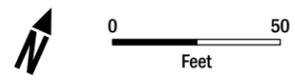
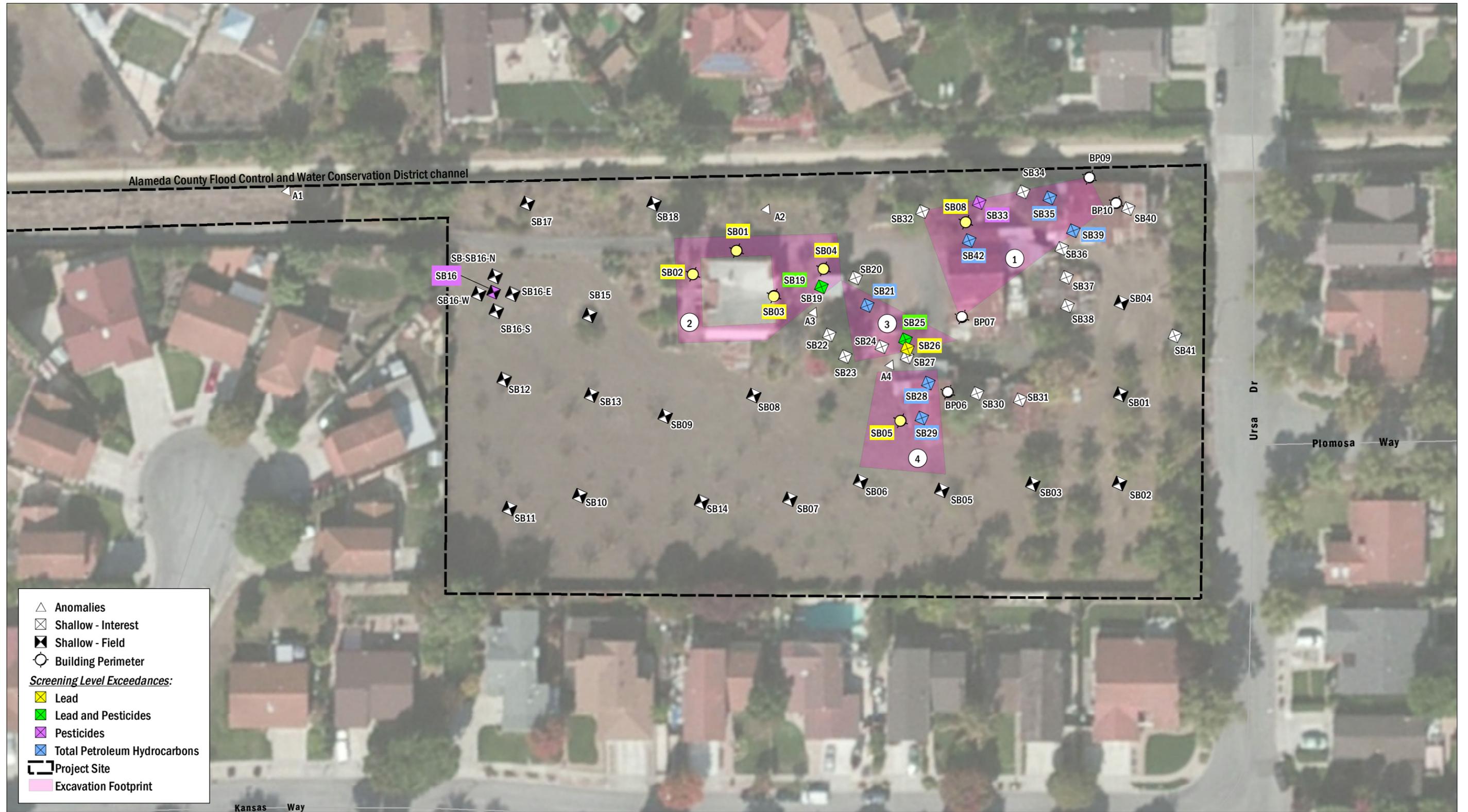
Each of these potential impacts is discussed in more detail below.

**Hazardous Building Materials:** Potential exposure to hazardous building materials could be reduced through appropriate identification, removal, and disposal according to applicable regulations. Both the federal Occupational Safety and Health Administration (OSHA) and California Division of Occupational Safety and Health (Cal-OSHA) regulate worker exposure during construction activities that disturb LBP. The Interim Final Rule found in 29 CFR 1926.62 covers construction work which may expose employees to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. OSHA-specified compliance includes respiratory protection, protective clothing, housekeeping, special high-efficiency filtered vacuums, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

ACMs are regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. Any ACMs, if present, would need appropriate abatement of identified asbestos prior to demolition or rehabilitation. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The Bay Area Air Quality Management District (BAAQMD) is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing) 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 national emissions standards for asbestos and requires that BAAQMD be notified 10 days in advance of any proposed demolition or abatement work on structures with asbestos-containing materials. All asbestos-containing material found on the site must be removed before the start of demolition or renovation activity in accordance with the rule, which contains specific requirements for surveying, notification, removal, and disposal of materials containing asbestos. Mitigation Measure HAZ-1 requires that a survey for hazardous building materials be undertaken at the site, and that any hazardous building materials (if present) be properly removed and disposed of by a certified contractor prior to demolition activities.

***Mitigation Measure HAZ-1: Hazardous Building Materials Survey and Abatement:*** *Prior to building permit issuance for demolition or renovation activities of any structures, the applicant shall retain a certified hazardous waste contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos and lead-based paint. If such substances are found to be present, the contractor shall properly remove and dispose of these hazardous materials in accordance with federal and state law, as a condition of the demolition permit. Following completion of removal activities, the applicant shall submit documentation to the City verifying that all hazardous materials were properly removed and disposed.*

Implementation of Mitigation Measure HAZ-1 and compliance with applicable local, State, and federal regulations would ensure hazardous building materials are appropriately handled, transported, and disposed of, and that adequate precautions to prevent potential exposure to workers or the public will be taken. This would reduce construction impacts related to hazardous building materials to **less than significant with mitigation**. This impact will not be addressed further in the EIR.



Imagery: ESRI, 2017

**FIGURE 4.8-1**  
Soil Sampling Results and Proposed Excavation Areas

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**Soil Contamination:** The Phase I/II Environmental Site Assessment and Shallow Soil Investigation (Phase I/II report; Ramboll, 2017) identifies localized areas of the project site where lead, organochlorine pesticides, and petroleum hydrocarbons are present in shallow soils at levels exceeding regulatory screening levels for residential land use (see Figure 4.8-1). Some of these areas also exceed the regulatory screening levels for direct construction worker exposure. The report concludes that these areas are generally well delineated and shallow in extent; and recommends that the identified areas be excavated prior to redevelopment to a depth of approximately three feet, resulting in approximately 850 cubic yards of spoils. If such excavation of contaminated soils is not undertaken prior to site grading, or if adequate precautions are not taken during such excavation, there is potential for exposure of construction workers or the public to hazardous materials through dermal (skin), respiratory (inhalation), or ingestion pathways.

Mitigation Measure HAZ-2 requires preparation and implementation, of a soil management plan (SMP), which includes procedures and protocols for minimizing worker exposure to contaminated materials, and ensuring that contaminated soils are handled, transported, and disposed of in a manner that does not create a significant environmental or human health risk. Mitigation Measure HAZ-2 also requires confirmation that contaminated soils do not remain at the site following excavation, or that appropriate mitigations to protect human health and the environment are undertaken if they do; that worker safety procedures are in place; and that a contingency plan is prepared and implemented if additional, currently unknown, contaminants are encountered during development activities.

**Mitigation Measure HAZ-2: Soil Remediation Work.** *Prior to issuance of grading and/or building permits for site development, the applicant shall retain a qualified environmental professional to oversee remediation work to remove or otherwise mitigate known contaminants or Recognized Environmental Conditions (RECs) at the property, as identified in the Phase I/Phase II Environmental Site Assessment and Shallow Soils Investigation prepared for the project site by Ramboll Environmental in March 2017. The remediation work shall be implemented to the satisfaction of the relevant overseeing agencies (City of Fremont Fire Department, and designated Alameda County or State Department Oversight Agency, or other appropriate agency having jurisdiction). Completion of the remediation work and procurement of an appropriate closure document or written statement from the relevant overseeing agency(ies) that the remediation work has been satisfactorily completed and without further conditions or obligations shall be submitted to the satisfaction of the City of Fremont Community Development Department. Compliance with this mitigation may require the applicant or their agent to complete a Preliminary Endangerment Report, Voluntary Cleanup Agreement or other documentation as determined by the appropriate agency, and receive concurrence that the site's RECs have been resolved.*

**Mitigation Measure HAZ-3: Site-Specific Health and Safety Plan.** *Prior to commencement of remedial actions required under Mitigation Measure HAZ-2, the applicant, or its contractors, shall prepare and implement a site-specific health and safety plan (HASP) to minimize impacts on public health, worker health, and the environment. The HASP shall be prepared in accordance with State and federal OSHA regulations (29 CFR 1910.120). Copies of the HASP shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The HASP shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The HASP shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

Implementation of Mitigation Measures HAZ-2 and HAZ-3 would reduce potential impacts related to subsurface soil contamination during construction to **less than significant with mitigation**. This impact will not be addressed further in the EIR.

**Use of Hazardous Materials:** Construction activities would require the use of limited quantities of certain hazardous materials such as fuels, oils, solvents, and glues, which if spilled could enter surface water, result in soil or groundwater contamination, or expose workers to hazardous materials. Given the size of

the proposed construction, there is a low likelihood for any significant quantities of hazardous materials being stored at the site. The project would obtain coverage under the State Water Resource Control Board's Construction General Permit, because the project site is greater than one acre. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) which would include best management practices to prevent accidental spills of hazardous materials during construction.

### Operation

During operation of the proposed project, there would be no routine transport, use, or disposal of significant quantities of hazardous materials. Households would use typical quantities of common commercially available household hazardous materials such as cleaning and maintenance supplies. Such products are labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Landscaping maintenance may require the use of limited quantities of industry standard hazardous materials such as herbicides or pesticides but not in such a manner as to represent a significant threat to human health and the environment. Such materials are typically stored in cabinets on-site in accordance with all laws and regulations and with proper permits, where applicable. A Hazardous Materials Business Plan would be required if the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds<sup>4</sup>; however, it is considered unlikely that such thresholds would be exceeded. As such, operational impacts of the project would have a **less than significant impact** in relation to the routine transport, use, or disposal of hazardous materials, and in relation to foreseeable accident or upset conditions. These impacts will not be further addressed in the EIR.

#### **8c) No Impact.**

There are no schools within a quarter mile of the project site. The closest schools to the project site are approximately one mile away (Warm Springs Elementary located at 47370 Warm Springs Boulevard, and James Leitch Elementary located at 47100 Fernald Street). As such, construction or operation of the project would have **no impact** with respect to emissions or handling of hazardous materials within a quarter mile of a school. This impact will not be further addressed in the EIR.

#### **8d) No Impact.**

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5 (CalEPA, 2017a; 2017b; DTSC, 2017; SWRCB, 2017a; 2017b), also known as the Cortese list. As discussed above, areas of shallow soil contamination associated with previous uses of the site have been confirmed in portions of the site (Ramboll, 2017). These contaminated soils would be removed prior to project construction as required by Mitigation Measure HAZ-2, to the satisfaction of the relevant overseeing agencies (City of Fremont Fire Department, and designated Alameda County or State Department Oversight Agency, or other appropriate agency having jurisdiction). Therefore, construction and operation of the project would have **no impact** in relation to listed hazardous materials sites and will not be further addressed in the EIR.

#### **8e), 8f) No Impact.**

There are no airports or airstrips within the City of Fremont. The closest airports by approximate distance from the project site are San Jose International Airport (seven miles south-southwest), Moffett Federal Airfield (eight miles west-southwest), and Hayward Executive Airport (10 miles northwest). As such, no associated airport land use plans are relevant for the project site, and the project would not result in a safety hazard for people residing or working in the project area. Therefore, construction or operation of the project would have **no impact** with respect to airport hazards and these impacts will not be further addressed in the EIR.

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<sup>4</sup> The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

## 8g) Less than Significant Impact.

### Construction

Construction of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The Regional Emergency Coordination Plan (RECP; Governor's Office of Emergency Services et al, 2008) provides an all-hazards framework for collaboration among responsible entities and coordination during emergencies in the San Francisco Bay Area. The RECP defines procedures for regional coordination, collaboration, decision-making, and resource sharing among emergency response agencies in the Bay Area. The RECP and its subsidiary plans do not identify specific evacuation routes, but rather define responsibilities among the multitude of interested and affected agencies and organizations, and identify general response strategies.

As discussed in Section 4.16, Traffic and Transportation, construction activities at the project site could result in temporary lane closures, increased construction truck traffic, and other roadway effects on Warm Springs Boulevard that could impede emergency response or evacuations. However, these effects would be temporary and would dissipate once trucks have cleared the public right-of-way. Construction activities would not fundamentally alter emergency response and evacuation routes in the vicinity of the project site, which would generally remain unchanged from existing conditions. While these construction impacts would be less than significant in relation to emergency and evacuation plans, it is noted that implementation of Mitigation Measure TRA-1, described below in Section 4.16, would further reduce these already **less-than-significant** impacts. This impact will not be addressed further in the EIR.

### Operation

As described above, there are no identified evacuation routes within proximity of the project site. The proposed project design would be reviewed by the Fremont Fire Department and Fremont Police Department, prior to approval to ensure that the project has adequate ingress and egress and incorporates additional design features (setbacks, clearances, turning radii, etc.) and does not impede emergency access. The City of Fremont Department of Public Works would review roadway improvements for compliance with the *City of Fremont Standard Details for Improvements in Public Right of Way* (2014), which would ensure adequate access to the project site and individual residences for emergency response purposes. Therefore, the potential impact related to emergency and evacuation plans would be **less than significant**. This impact will not be further addressed in the EIR.

## 8h) Less than Significant Impact.

The project site is not within the "Fremont Very High Fire Hazard Severity Zone" adopted by the City of Fremont, and is designated by the State as being a "Local Response Area Urban Unzoned" on the California-Defined Fire Hazard Severity Zones Map (City of Fremont, 2007). This designation indicates that the area is not within the wildland-urban interface and, therefore, special development controls relating to heightened fire protection and vegetation management are not required to minimize the risk of wildland fires. The portion of Ursa Drive abutting the project site, and residential properties to the east of Ursa Drive are designated by the State as being within the "Local Response Area Moderate" zone, where there is a moderate risk of wildland fires (but are outside of the "Fremont Very High Fire Hazard Severity Zone." The project site is located in an urban area that is serviced by the Fremont Fire Department. New construction would be required to comply with applicable fire code and fire suppression requirements, which would minimize the potential adverse effects from fire. In addition, construction of the proposed project would remove the existing overgrown, dry grass and old ancillary structures which predate modern fire code construction and could present a fire hazard. Therefore, the proposed project would not expose people or structures to significant risks associated with wildland fires. The impact would be **less than significant** and will not be further addressed in the EIR.

### References:

California Environmental Protection Agency (CalEPA), 2017. Solid waste disposal sites with waste constituents above hazardous waste levels outside the waste management unit. Available online at: <http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CurrentList.pdf>. Accessed May 22, 2017.

- \_\_\_\_\_, 2017b. Information Required From the Department of Toxic Substances Control Under Government Code Section 65962.5(a). Available online at: <https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>. Accessed May 22, 2017.
- City of Fremont, pers. comm., 2017. In person discussion with Bill Roth, City of Fremont Planner and Emma Rawnsley, AECOM Planner. March 30, 2017.
- \_\_\_\_\_, 2014. City of Fremont Standard Details for Improvements in Public Right of Way. Available online: <https://fremont.gov/235/Standard-Details>. Accessed May 23, 2017.
- \_\_\_\_\_, 2007. Local Response Area (LRA) Very High Fire Hazard Severity Zones in the City of Fremont (FMC 7-13102). City Ordinance 33-2007.
- DTSC, 2017. Envirostor online database. Hazardous Waste and Substances Site List. Available online at [http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site\\_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST](http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST). Accessed May 22, 2017.
- Governor's Office of Emergency Services et al, 2008. San Francisco Bay Area Regional Emergency Coordination Plan. Available online at: <http://www.bayareauasi.org/recp>. Accessed May 23, 2017.
- JR Associates, 2016. Magnetic Investigation at 48424 Warm Springs Boulevard, Fremont, California. Prepared for Robson Homes, LLC. May 10, 2016.
- Ramboll, 2017. Phase I Environmental Site Assessment and Shallow Soil Investigation. 48495 Ursa Drive/48416 Warm Springs Boulevard, Fremont, California. Prepared for Robson Homes, LLC. March 2017.
- SWRCB, 2017a. Geotracker online database. List of Leaking Underground Storage Tank Sites for Alameda County. Available online at: [https://geotracker.waterboards.ca.gov/search?CMD=search&case\\_number=&business\\_name=&main\\_street\\_name=&city=Fremont&zip=&county=&SITE\\_TYPE=LUFT&oilfield=&STATUS=&BRANCH=&MASTER\\_BASE=&Search=Search](https://geotracker.waterboards.ca.gov/search?CMD=search&case_number=&business_name=&main_street_name=&city=Fremont&zip=&county=&SITE_TYPE=LUFT&oilfield=&STATUS=&BRANCH=&MASTER_BASE=&Search=Search). Accessed May 22, 2017.
- \_\_\_\_\_, 2017b. List of "Active" Cease and Desist Orders and Cleanup and Abatement Orders. Available online at <http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx>. Accessed May 22, 2017.

## 4.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9.a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

The project area is located within the Auga Fria watershed. Nearby hillsides drain to an unnamed creek located east of the project site. This creek channel passes below I-680 in a culvert and connects to an engineered flood control channel, which passes along the northern boundary of the project site and is owned by the Alameda County Flood Control and Water Conservation District (ACFCWCD). After passing the project site to the north, drainage in this channel passes below I-880 and discharges to Coyote Creek.

The project site is part of a former orchard, with limited paved areas, outbuildings, and access roads made of hard-packed dirt and gravel. Soils are primarily clays and the site is flat, with a slight grade to the southwest. Stormwater would slowly infiltrate at the site, percolating into the ground through unpaved areas. During large storm events, a portion of the drainage would likely runoff to the southwest towards adjacent residential areas. An existing catch basin in the southwest corner of the site connects to

municipal drainage facilities in Kansas Way. Runoff from the project site would contribute little, if any, runoff to the engineered channel to the north due to site topography.

The project area overlies the Niles Cone groundwater subbasin. Niles Cone has a series of relatively flat lying aquifers separated by extensive clay aquitards. The Newark Aquifer, the shallowest aquifer in Niles Cone, is located between 40 and 140 feet below ground surface. Its thickness ranges from less than 20 feet at the western edge of the basin to more than 140 feet at the Hayward Fault (Alameda County Water District, 2017).

A groundwater well is located west of the on-site tankhouse. This well was previously used for potable water and for irrigation of the orchard. Groundwater monitoring reports for nearby properties indicate that depth to groundwater ranges between approximately 14 and 24 feet below ground surface and that shallow groundwater flows to the west or west-southwest (Ramboll Environ, 2017).

The project site is not within a designated floodplain area, although mapped floodplains are nearby. A designated floodplain associated with fluvial flows from Coyote Creek and coastal inundation is located west of the project site near I-880. The engineered flood control channel located north of the site is also mapped as a floodplain area; this channel was designed to convey flow from upgradient areas during a 100-year storm event.

### **Regulatory Framework:**

The State Water Resources Control Board (SWRCB) administers the statewide NPDES program. Stormwater discharges associated with construction and land disturbance activities are regulated under the Construction General Permit (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended). This permit applies to projects that have one or more acres of soil disturbance. The permit requires that a project develop and implement a construction site stormwater pollution prevention plan (SWPPP) that specifies management activities, including stormwater best management practices (BMP), erosion and sedimentation controls, run-on and runoff controls, and dewatering procedures for nuisance-water removal. The project would seek coverage under the Construction General Permit by filing permit registration documents with the SWRCB and developing and implementing a SWPPP. Compliance with the Construction General Permit is overseen and enforced by the San Francisco Bay Regional Water Quality Control Board (RWQCB).

The San Francisco Bay RWQCB also regulates stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo under a single Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008). This permit includes provisions for new development and redevelopment projects. Provision C.3 requires source control, site design, and stormwater treatment measures to address stormwater pollutants and to prevent increases in flow rates from developed areas. Projects are required to evaluate opportunities for incorporating low impact development strategies, such as self-treating/self-retaining landscape areas, stormwater re-use, on-site infiltration, and evapotranspiration. If these methods are not compatible due to specific site constraints, the permit allows for the use of natural, landscape-based stormwater treatment measures as alternative means of providing stormwater management. Treatment measures must be hydraulically sized to treat the runoff and are required to be regularly maintained. The Alameda County Clean Water Program C.3 Stormwater Technical Guidance Manual (Clean Water Program, 2016) provides specifications for specific types of treatment measures, including bioretention areas.

The City of Fremont has design standards that address drainage, including provisions from the FMC Chapter 18.210, Stormwater Management and Discharge Control, with guidance from the Alameda County Hydrology and Hydraulics Manual (Alameda County Flood Control and Water Conservation District, 2016).

**Discussion:****9a), 9f) Less than Significant Impact with Mitigation Incorporated.**Construction

Construction activities, such as grading, vegetation removal, excavation, and backfilling, have the potential to affect surface water quality. Disturbed soils temporarily exposed to the erosive forces of wind, rain, and stormwater runoff could be released to nearby drainages and stormdrains. In addition, stormwater runoff could be contaminated with chemicals used during construction (such as fuels, oils, and solvents) as the result of the daily use, transportation, and storage of these materials, or from contaminants remobilized from areas of existing soil contamination at the project site. Construction activities also have the potential to impact groundwater quality if groundwater is directly exposed to construction contaminants, such as after hazardous material spills.

Because disturbed areas within the project site would be greater than one acre, the project would obtain coverage under the SWRCB's Construction General Permit. As part of the Construction General Permit, the contractor would prepare and implement a SWPPP that specifies BMPs to avoid and minimize the discharge of pollutants from the site throughout the construction period. Potential erosion and transportation of soil particles would be managed through standard construction BMPs, such as installation of silt fences, which would substantially reduce potential sediment transport from the construction site. Other construction-related contaminants, such as oil and greases, would be managed through appropriate material handling and good housekeeping practices at the construction site. Other BMPs that would be implemented at the site include stabilized construction entrances and stormdrain inlet protection. The contractor would also be responsible to maintain these BMPs in good and effective condition.

Although unlikely, perched groundwater could be within a few feet of the excavation level, and construction dewatering may be required. If groundwater is encountered during construction, water would be removed from active work areas, treated where necessary (sediments would be allowed to settle), and disposed of in accordance with permit requirements. Groundwater quality could also be adversely affected if poor-quality water or chemicals enter a well from the surface and that well provides a conduit for contaminants to enter the groundwater. The existing well near the tankhouse would be properly destroyed as part of the project prior to site redevelopment, in accordance with Alameda County Water District requirements, which would be enforced through conditions of a well destruction permit required under ACWD Ordinance No. 2010-01. Therefore, the potential for contaminants to enter groundwater through this well would be eliminated.

As discussed in Section 4.8, Hazardous Materials, there is evidence of historic contamination at the site, including localized areas of lead and organochlorine pesticides and total petroleum hydrocarbons (fuels) (Ramboll, 2017). The project includes excavation of these areas of contaminated soils, and Mitigation Measure HAZ-2 requires that such activities be undertaken under the oversight of an environmental professional, and be implemented to the satisfaction of the Fire Department and relevant oversight agency(ies) prior to issuance of a grading permit. The BMPs required by the project SWPPP would also be applicable during soil remediation activities, and implementation of these BMPs would reduce the potential for contaminants to be mobilized by stormwater during site remediation activities.

In summary, the applicant would implement measures to reduce potential erosion impacts during construction in accordance with the aforementioned regulations, and would destroy the on-site well in accordance with Alameda County Water District requirements. Mitigation Measure HAZ-2 would also require the project proponents to implement appropriate controls during remediation of historic sources of contamination prior to development at the site. Therefore, construction of the proposed project would not substantially degrade water quality, and impacts related to the potential violation of water quality standards and substantial degradation of water quality would be **less than significant with mitigation** incorporated. This impact will not be further addressed in the EIR.

## Operation

By introducing new impervious surfaces in the watershed, the proposed residential development and site improvements could increase the volume of stormwater runoff at the site and affect downgradient areas. Hydromodification, which refers to the change in timing, peak discharge, and volume of runoff caused by land development, can contribute to faster flow rates and greater runoff volumes, potentially increasing erosion in downstream areas. Water quality can also be affected by common pollutants that are discharged from urban watersheds (e.g., sediment, trash, oil/grease, etc.). Because the project would add more than 10,000 square feet of impervious surfaces to the site, the project is required to comply with San Francisco Bay RWQCB's Municipal Regional Permit, with guidance from the Alameda County Clean Water Program C.3 Stormwater Technical Guidance Manual (Clean Water Program, 2016). Provision C.3 of the NPDES permit governs storm drain systems and regulates post-construction stormwater runoff. The provision requires new development and redevelopment projects to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows.

Consistent with the Municipal Regional Permit's C.3 requirements, the storm drainage system would be designed to mimic existing drainage patterns and treat stormwater runoff from developed areas at an on-site bioretention facility. Approximately 2.4 acres of the project site would be developed with residences. Within that area, approximately one acre would be pervious (e.g., landscaping) and 1.4 acres would be impervious surfaces (e.g., rooftops, driveways, and the street). Stormwater from the residential area would infiltrate locally or be collected in a drainage system that discharges to the curb. Almost all of the stormwater would then be conveyed to a project-built bioretention facility located in the southwestern corner of the site. The bioretention facility is a soil and plant based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. A bioretention basin distributes stormwater runoff evenly along a ponding area, allowing water velocities to slow and particulates (and particulate-bound contaminants) to settle. Stormwater then percolates through the soil to an underlying rock layer, and to the underlying aquifer or to an underdrain. The bioretention basin provides an opportunity for soil bacteria to degrade trapped contaminants.

The bioretention basin would treat the stormwater runoff prior to it being discharged to the public storm drain system through a stormdrain easement to the southwest. A small portion of the site adjacent to Ursa Drive would drain to the public storm drain system on that road.

In summary, the project applicant would implement post-construction stormwater management in accordance with the aforementioned regulations. Therefore, operation of the proposed project would not substantially degrade water quality, and impacts related to the potential violation of water quality standards and substantial degradation of water quality would be **less than significant**. This impact will not be further addressed in the EIR.

### **9b) Less than Significant Impact.**

The proposed project would include additional landscaping on the project site; however, the net effect of the proposed project would increase the total amount of impervious surfaces in the redeveloped portion of the site (representing 2.4 acres of the total 2.7 acres) and, thus, the amount of recharge to the underlying groundwater aquifer would be reduced. The proposed project would be required to include design features that retain runoff from impervious areas on the project site in accordance with the Alameda County Clean Water Program guidelines. Guidelines for new development and redevelopment projects include the following site design measures that encourage on-site filtration:

- Direct roof runoff into cisterns or rain barrels for use, or onto vegetated areas.
- Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
- Direct runoff from driveways/uncovered parking lots onto vegetated areas.
- Construct sidewalks, walkways, and/or patios with permeable surfaces.
- Use micro-detention, including distributed landscape-based detention.
- Plant or preserve interceptor trees.

The proposed project includes low and medium water use plantings in areas adjacent to the residences and a biotreatment area in the southwestern portion of the site to treat stormwater runoff from the redevelopment area of the project site. Incorporation of these drainage design measures in accordance with C.3 provisions and Alameda County Clean Water Program guidelines would help minimize any increased flows off-site and encourage on-site infiltration. Furthermore, the project development area is very small (2.4 acres) in comparison to the Niles Cone groundwater subbasin (65,800 acres), and a reduction in groundwater recharge, if any, would be negligible to the groundwater basin as a whole. Development of the site would not involve groundwater extraction. Therefore, the proposed project would not lower the groundwater table locally as a result of groundwater extraction or substantively reduce groundwater recharge at the site.

In summary, despite a potential reduction in the amount of infiltration that would occur on-site due to an increase in impervious surfaces, the proposed biotreatment retention areas would encourage on-site infiltration and, because no groundwater extraction would occur, the potential impact of the project on regional groundwater levels would be **less than significant**. This impact will not be further addressed in the EIR.

**9c), 9d) Less than Significant Impact.**

The project site is located in an urban watershed served by municipal storm drains, with a flood control channel located north of the site. Soils are primarily clays and the site is flat, with a slight grade to the southwest. The project site currently contains primarily pervious surfaces and the development plan for the property would alter the existing drainage patterns by creating new impervious surfaces as well as landscaped areas. The project would not alter the course of a stream or river.

The proposed improvements would be required to include drainage control features in accordance with Municipal Regional Permit and Alameda County Clean Water Program requirements. Stormwater runoff would be managed through the incorporation of a permanent biotreatment area and landscaped areas to manage runoff from new structures and other impervious surfaces. Stormwater would not be directed to the flood control channel. Because the bioretention facility would be designed to drain over a couple of days, instead of immediately releasing water from the site in direct response to precipitation, the bioretention facility would reduce the magnitude of, and change the timing of, peak runoff from the site. Although changes in the drainage patterns of stormwater runoff would occur due to the proposed layout of the buildings and location of roof drains, implementation of drainage control requirements would not substantially alter drainage patterns such that erosion, siltation, or flooding on- or off-site would occur. Impacts would be **less than significant** and this impact will not be further addressed in the EIR.

**9e) Less than Significant Impact.**

As discussed above under Items 9a through 9d, potential impacts associated with the capacity of drainage infrastructure would be minimized through adherence to drainage control requirements. As such, stormwater runoff would be managed through permanent stormwater controls such as biotreatment areas and landscape areas. Implementation of the drainage controls required by Municipal Regional Permit and Alameda County Clean Water Program would avoid or minimize potential effects related to the contribution of substantial amounts of additional runoff, or pollution, to the municipal storm drain system. Impacts would be **less than significant** and this impact will not be further addressed in the EIR.

**9g), 9h) No Impact.**

According to Federal Emergency Management Agency (FEMA) flood insurance rate maps, the project site is not located within a special flood hazard area (FEMA, 2009). Therefore, the project would not place housing in a FEMA designated-flood hazard area, nor would project structures impede or redirect flood flows. The project would not contribute additional flows to the existing ACFCWD channel along the northern boundary of the site, which is mapped as a floodplain and was designed to convey flow from upgradient areas during a 100-year storm event. Thus, there would be **no impact** with respect to flood hazard areas and this impact will not be further addressed in the EIR.

**9i) No Impact.**

According to the Dam Failure Inundation Areas map within the City's General Plan Safety Element, the project site is not within a dam inundation zone (City of Fremont, 2015) and the flood control channel

north of the site is below grade. Therefore, there would be **no impact** as a result of failure of a levee or dam. This impact will not be further addressed in the EIR.

**9j) No Impact.**

Seiche waves are not considered a hazard to the project because it is not located near any large enclosed bodies of water. The project site is also located well inland and not in a tsunami inundation zone (ABAG, 2017). The project site is relatively flat but it is not far from the base of upland areas to the east. However, there are no potential sources that could contribute large volumes of water resulting in mudflows that might affect the project site. Thus, there would be **no impact** with respect to these hazards, and this impact will not be further addressed in the EIR.

**References**

Alameda County Water District. 2017. Groundwater Monitoring Report 2016. Water Resources Department, Groundwater Resources Division. February 9, 2017.

Association of Bay Area Governments (ABAG). Resilience Program. Tsunami Inundation Area for Emergency Planning. Available online at: <http://resilience.abag.ca.gov/open-data/>. Accessed May 23, 2017.

City of Fremont. 2015. General Plan Safety Dam Failure Inundation Areas. Community Development Department- Planning Division. Printed June 6, 2015.

Clean Water Program. 2016. C.3 Stormwater Technical Guidance. A handbook for developers, builders, and project applicants, Version 5.1. May 2, 2016.

Federal Emergency Management Agency (FEMA). 2009. Map number 06001C0606G. Flood Insurance Rate Map, Panel 0606G. Alameda County, California and Incorporated Areas. August 3, 2009.

Ramboll Environ US Corporation. 2017. Phase I Environmental Site Assessment and Shallow Soil Investigation. 48495 Ursa Drive/48416 Warm Springs Boulevard, Fremont, California. Prepared for Robson Homes, LLC. March.

## 4.10 Land Use and Land Use Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10.a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulatory Framework:**

City of Fremont General Plan

The *City of Fremont General Plan* (General Plan) was adopted by the City Council on December 13, 2011. The City's General Plan functions as a high-level statement of the community's vision as well as an on-the-ground tool used by the City to make development decisions over a 25-year period. The General Plan aims to establish a flourishing downtown, increase jobs to match an increasing resident workforce, provide a variety of housing types, and provide pedestrian-oriented commercial districts. The General

Plan also addresses the overarching vision of Fremont as a “green” city through goals and policies to meet climate change objectives, reduce solid waste, and enhance the pedestrian and cycling network. Ten Guiding Principles are embodied within the City’s General Plan that collectively provide a framework for the goals and policies laid out in the Plan.

The following policies, and implementation action from the Land Use Element of the General Plan (City of Fremont, 2011) apply to the proposed project:

**Goal 2-2: Directing Change.** Growth and development that is orderly and efficient, leverages public investment, ensures the continued availability of infrastructure and public services, reduces adverse impacts on adjacent properties, and protects the natural environment.

- **Policy 2-2.4: Use of the General Plan Land Use Map.** Ensure that future land use decisions are fully consistent with the General Plan Land Use Map. Each General Plan land use category shall have at least one corresponding zoning district. More than one zoning district per General Plan category may be established for categories which accommodate a wide range of densities or development types. Residential zoning districts should generally be differentiated by the number of units allowed per net acre (or square feet of lot area per dwelling unit).
- **Policy 2-2.5: Zoning and Subdivision Regulations.** Use zoning and subdivision regulations to direct the city’s growth, ensure sufficient opportunities for new development, improve Fremont’s quality of life, create complete neighborhoods, reduce nuisances, achieve compatibility between adjacent properties and uses, address land use conflicts, and protect the health and safety of residents, visitors, and workers.
  - **Implementation 2-2.5.F: Planned (P) District Use.** Planned development (P) zoning to provide flexibility in application of the zoning code, encourage more desirable site planning outcomes, or achieve particular mixes of land uses or unit types.

#### City of Fremont General Plan Land Use Designation

As shown of Figure 4.10-1, the project site is designated as Residential - Low (2.3 to 8.7 units per acre) in the City’s General Plan. This designation corresponds to most of Fremont’s single-family residential neighborhoods. These areas are characterized by subdivisions of detached homes, usually on lots of 5,000 to 10,000 square feet, but may also include larger-lot subdivisions in the 10,000- to 20,000-square-foot range. The high end of the density range (8.7 units per acre), which generally results in lots less than 6,000 square feet, is only permitted where specific conditions are met as established by the General Plan and Planned District zoning.

#### Warm Springs Community Plan Area

The project site is identified in the Community Plans Element of the General Plan as within the Warm Springs Community Plan Area (Figure 4.10-1). The following policy applies to the proposed project:

- **Policy 11-11.1: Maintaining Warm Springs Residential Areas.** Maintain and enhance Warm Springs residential neighborhoods and promote continued investment in the area’s housing stock, roads, parks, and public facilities.

#### City of Fremont Zoning Ordinance

The project site is zoned by the City of Fremont as Single-Family Residential, 6,000-square-foot minimum lot size (R-1-6) (City of Fremont, 2017a). The R-1-6 zoning district is intended to promote and maintain predominantly single-family home neighborhoods together with compatible accessory and supporting uses (City of Fremont Municipal Code Section 18.90, “Residential Districts,” of Chapter 18, “Planning and Zoning”). Permitted uses within the R-1-6 zoning district include single-family dwelling units, guesthouses, and duplexes or two-family dwelling units on corner lots. The R-1-6 zoning district requires a minimum lot size of 6,000 square feet (City of Fremont, 2017b).

The project site is not zoned with a combining or overlay district that would indicate potential safety hazards, historic resources, or natural resources that require special consideration (City of Fremont, 2017a).

### Discussion:

#### 10a) No Impact

The project site contains an existing, unoccupied house that is eligible for historic listing; associated outbuildings; and a remnant orchard. Single-family residences are located adjacent to the southern and western border of the project site, north of the project site's existing access road, and along the eastern side of Ursa Road. The project site is an infill site, and its development would not introduce a use or physical feature that would create a barrier, divide, or separate adjacent uses, or impede movement or circulation through the neighborhood.

The project does not propose to close any publicly accessible roadway that exists today. All the existing residences in the vicinity of the project site can be accessed by Ursa Drive and by roadways within those neighborhoods. The existing site access off Warm Springs Boulevard may be removed; however, this would not impede access to existing neighborhoods adjacent to the project site and may provide a new pedestrian linkage from Ursa Drive to Warm Springs Boulevard. Therefore, **no impact** associated with physical division of an established community would occur due to construction or operation of the proposed project, and this impact will not be further addressed in the EIR.

#### 10b) No Impact

##### Consistency with City General Plan Policies

As discussed further below, the proposed project would provide single-family residential uses consistent with the project site's land use designation and would, therefore, support Policy 2-2.4 of the General Plan, which promotes consistency of land use decisions with the General Plan Land Use Map. Rezoning of the project site to a Planned District would ensure consistency with Policy 2.2-5 and Implementation 2.2-5F, which seek to encourage more desirable planning. In addition, the proposed project would support Policy 11-11.1 of the General Plan, which promotes the continued investment in the City's housing stock within the Warm Springs Community Plan Area.

##### Land Use Designation

The proposed project would be consistent with the General Plan's Residential – Low land use designation. Based on this land use designation applicable to the project site, the General Plan would permit a density range between 2.3 and 8.7 residential dwelling units per net acre, or approximately six to 23 dwelling units could be developed on the 2.67-acre project site. The proposed 17 residential units would be within the range of dwelling units allowed by the General Plan on the project site.

##### Zoning

The project site is currently zoned R-1-6 (Single-Family Residential, 6,000-square-foot minimum lot size). Based on this zoning district, a maximum of 19 dwelling units would be permitted on the project site<sup>5</sup>; the proposed 17 residential units would, thus, be within the maximum allowable units for the site. The proposed project would rezone the project site from R-1-6 to a Planned District. Planned District zoning is intended to provide flexibility in application of residential development standards, encourage more desirable site planning outcomes, or achieve particular mixes of land uses or unit types (City of Fremont, 2017b). Rezoning of the project site to a Planned District would allow development of the project site with single-family homes on lots that would range in size from 4,000 to 6,075 square feet. Furthermore, the proposed project would meet additional standard requirements of the Planned District outlined in FMC Section 18.110, "Planned Districts." In addition, the City would review the project's conformance with the City's Small-Lot Single-Family Residential Development Design Guidelines (City of Fremont, no date) during the entitlement process.

<sup>5</sup> The 2.67-acre project site is equal to 116,305 square feet. Using this square footage and an allowable density of one residential unit per 6,000 square feet, a maximum of 19 dwelling units could be developed on the project site.



Imagery: ESRI, 2017  
Landuse: City of Fremont, 2017

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## Conclusion

For the reasons described above, the proposed project would be consistent with General Plan policies and the land use designation for the project site. With approval of the proposed project zoning change, the proposed project lot sizes and building setbacks would comply with zoning regulations. Therefore, **no impact** associated with conflicts with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would occur as a result of construction or operation of the proposed project, and this impact will not be further addressed in the EIR.

### 10c) No Impact.

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the project area. Therefore, the proposed project would have **no impact** on or conflict with habitat conservation plans in the area, and this impact will not be further addressed in the EIR.

### References:

City of Fremont, 2011. *City of Fremont General Plan*. Land Use Element. Adopted December 2011. Available: <https://fremont.gov/398/General-Plan>. Accessed April 27, 2017.

City of Fremont, 2017a. SICGISA. Fremont Mapping. Available: <http://egis.fremont.gov/apps/public/>. Accessed: May 24, 2017.

City of Fremont, 2017b. City of Fremont Municipal Code, Chapter 18, Planning and Zoning.” Available: <http://www.codepublishing.com/CA/Fremont/>. Accessed May 24, 2017.

City of Fremont, no date. *Design Guidelines for Small-Lot Single-Family Residential Developments*. Prepared by Van Meter Williams Pollack for the City of Fremont Development and Environmental Services Department. Available online: <https://fremont.gov/DocumentCenter/View/1105>.

## 4.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion:

#### 11a), 11b) No Impact.

According to the USGS Mineral Resources On-Line Spatial Data (USGS, 2017), the project site is not in close proximity to or located on a known mineral resource. Because the project site is not located near or on a known mineral resource, there would be no loss of a known or locally important mineral resource. Accordingly, there would be **no impact** to mineral resources, and these impacts will not be addressed further in the EIR.

### References:

United States Geological Survey (USGS), 2017, Mineral Resources On-Line Spatial Data, Available at <https://mrddata.usgs.gov/general/map.html>, Accessed April 12, 2017

## 4.12 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12.a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12.d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12.f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

#### Existing Noise Environment

The major noise source affecting the project site is vehicular traffic along Warm Springs Boulevard to the west and I-680 to the east. The City's General Plan EIR establishes existing noise conditions along Warm Springs Boulevard between Warren Avenue and Scott Creek Road as 67 dBA  $L_{dn}$ <sup>6</sup> (or 60 dBA hourly  $L_{eq}$  throughout the day and night) at 75 feet from the roadway centerline. The development area of the proposed project is more than 1,000 feet from the centerline of Warm Springs Boulevard.

#### Sensitive Receptors

Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to noise. Examples include schools, day care centers, and residential areas. The project site is located in the Warm Springs Community Plan Area of Fremont. The main area of the project site is surrounded by residential uses with commercial uses to the west of the narrow driveway strip extending to Warm Springs Boulevard. The project site is bounded by Ursa Drive to the east, single-family housing to the north, south, and west (the closest homes in each direction are approximately 15 to 40 feet from the project site boundary). The nearest school is Warm Springs Elementary School less than one mile to the north. Nearby parks and open space areas include Plomosa Park approximately 150 feet to the east, Lone Tree Creek Park approximately 1,200 feet to the north, and Cedar Lawn Cemetery approximately 1,400 feet to the south.

<sup>6</sup> Day-night noise level is used commonly for describing community noise levels.  $L_{dn}$  is based on a 24-hour  $L_{eq}$  with a "penalty" of 10 dBA added during night hours (10 p.m. to 7 a.m.) because this time is normally for sleep.  $L_{eq}$  or equivalent noise level is used to address the worst noise hour.  $L_{max}$  or maximum noise level is the highest instantaneous noise level during a specified time period. dBA or A-weighted sound level is sound pressure in decibels as measured on a sound level meter using the A-weighting filter network (CalTrans, 2009).

### Applicable Noise Regulations

The City of Fremont General Plan Safety Element (adopted in 2011) outlines acceptable exterior and interior noise standards for residential development. The General Plan states that exterior noise levels should not exceed an  $L_{dn}$  of 60 dBA at backyards in single-family housing projects; however, where an outdoor  $L_{dn}$  of 60 dBA or lower cannot be achieved after the application of feasible mitigations, an  $L_{dn}$  of 65 dBA may be permitted at the discretion of the City Council. The General Plan states that interior noise levels should not exceed 45 dBA  $L_{dn}$  in new housing. Typical instantaneous noise levels should not exceed 50 dBA in bedrooms during the nighttime or 55 dBA in any other rooms and bedrooms during the daytime.

FMC Section 18.50.040 excludes from its performance standards noise generated from temporary construction activities. However, construction activity is controlled via limitations on construction hours. FMC Chapter 18.160 limits weekday construction hours for activities within 500 feet of a noise-sensitive receptor to the weekday hours of 7:00 a.m. and 7:00 p.m. and the Saturday or holiday hours of 9:00 a.m. to 6:00 p.m.; Sunday construction is not allowed.

### Applicable Vibration Regulations

The City of Fremont does not have standards regarding construction vibration.

### **Discussion:**

#### **12a), 12d) Less than Significant Impact with Mitigation Incorporated.**

#### Construction Noise

Construction of the project would result in noise levels that may temporarily affect surrounding sensitive receptors. Construction activity noise levels at the project site would fluctuate during the different construction phases, exposing nearby sensitive receptors to substantial noise. Construction-related material haul trips would raise ambient noise levels along haul routes, and the amount of increase would depend on the number of haul trips made and types of vehicles used. For construction activities occurring within 500 feet of sensitive receptors, construction hours would be limited per the City's Municipal Code.

In general, demolition and site preparation phases of construction typically generate the most substantial noise levels due to the on-site equipment associated with these activities. Consistent with the "general assessment" method for construction activity noise from the Federal Transit Administration (FTA) (FTA, 2006)<sup>7</sup>, for purposes of this analysis, the two loudest pieces of equipment associated with project construction are a scraper and loader operating simultaneously, at full power, and from a single acoustic point representing the geographic center of the studied construction zone or area. The reference noise level for the combination of these two pieces of equipment would be 86 dBA  $L_{max}$  at a distance of 50 feet.

Demolition activities would primarily occur in the northeastern portion of the property where the nearest sensitive receptor to the north is approximately 130 feet away from this acoustic center-point per the aforementioned FTA technique<sup>8</sup>. At a distance of 130 feet, potential noise levels from construction equipment used during the demolition phase is estimated to be as high as 76 dBA.

Site preparation, grading, and building construction phases would occur on the rectangular area of the project site using construction equipment similar to and potentially as intensely as the demolition phase. Construction noise would be substantially greater (i.e., 16 dBA more) than existing noise levels at nearby sensitive receptor locations, and would be perceived by healthy human hearing as more than a doubling of the sound loudness [City of Fremont, 2013]). This increase in ambient noise conditions would be a significant impact unless mitigated to a level where the increase over ambient noise would be less than 5 dBA for such temporary noise generated by construction activity. Mitigation Measure NOI-1 is proposed to

<sup>7</sup> This FTA "General Assessment" or "two-loudest" method is often used and cited when the actual project construction equipment roster is unknown at the time of impact assessment.

<sup>8</sup> Per the "General Assessment" method to estimate construction noise, it is assumed all pieces of equipment operate at the center of the project site or defined construction zone or area over which construction equipment and vehicles would be active.

reduce noise impacts during construction by requiring use of noise-reduction devices on construction equipment, and selecting and/or locating construction noise sources to minimize impacts on surrounding sensitive receptors.

**Mitigation Measure NOI-1: Modification, Placement and Operation of Construction Equipment.** *To reduce noise impacts during construction, the applicant shall include the following measures in contractor specifications for the project, and such measures shall be implemented during construction:*

- *Construction equipment shall be well maintained and used judiciously to be as quiet as practical.*
- *Construction activities (including the loading and unloading of materials and truck movements) shall be limited to the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted on Sundays or holidays.*
- *Excavating, grading and filling activities (including warming of equipment motors) shall be limited to between the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No excavation, grading or filling activities shall be permitted Sundays or holidays.*
- *All internal combustion engine-driven equipment shall be equipped with mufflers, which are in good condition and appropriate for the equipment.*
- *The contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.*
- *Loading, staging areas, stationary noise generating equipment, etc. shall be located as far as feasible from sensitive receptors. .*
- *The contractor shall comply with Air Resource Board idling prohibitions of unnecessary idling of internal combustion engines.*
- *Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the project sponsor in the event of noise complaints. The applicant shall designate an on-site complaint and enforcement manager to track and respond to noise complaints.*

With implementation of Mitigation Measure NOI-1, construction of the proposed project would comply with the City of Fremont General Plan noise standards and would not result in substantial temporary or periodic increase in noise levels above ambient conditions. Construction noise impacts associated with project development would, therefore, be **less than significant with mitigation**. These impacts will not be further addressed in the EIR.

## **12c) Less than Significant Impact.**

### Operational Noise

Potential noise sources associated with operation of the proposed project would include motor vehicle trips generated by the proposed project and maintenance activities for the proposed bioretention pond. Residential noise such as backyard activities, AC units, and landscape maintenance are typical of residential areas and would not be significant enough to substantially affect ambient conditions without the project. The project would consist of residential uses with no other sources of substantial noise associated with long-term project operations. The proposed project is designed and would be built to meet the City of Fremont and California building code requirements regarding interior and exterior noise levels for residential use. General Plan policy requires preparation of a noise insulation study, conforming to the methodology of the State Building Code, where new housing is exposed to exterior noise levels greater than 60 dB(A) or greater.

As stated in the City's General Plan (City of Fremont, 2011), projected increases in noise from increased traffic generation due to development in the City would not be significant on most secondary roads, as traffic volumes generally must increase by 100 percent for their noise level to increase by 3 dBA. An increase in average noise levels of 3 dBA or less is not considered a significant change, while an increase of 5 dBA is considered readily perceptible to most people. As discussed in Section 4.16, Traffic and Transportation, the proposed project would result in a minimal increase in traffic on the surrounding roadway network. Operation of the project would, therefore, not result in a substantial increase in noise over existing conditions due to increased traffic generation. The General Plan EIR evaluated noise increases along Warm Springs Boulevard as a result of General Plan implementation (Table 4-37: Existing and Future Traffic Noise Levels in Fremont). With implementation of the General Plan by 2035, the EIR anticipated an increase in noise levels from 67 Ldn to 70 Ldn at 75 feet from the street centerline. The proposed project would be located approximately 1,000 feet or more from the centerline of Warm Springs Boulevard, thus, noise levels would be less, even with the addition of traffic from new development anticipated under the General Plan.

Anticipated maintenance activities associated with the proposed bioretention pond in the southwest corner of the site would be limited to monthly visual inspections and biannual detailed inspections. Maintenance activities would include erosion and slope control, vegetation control, removing debris/litter, and vector control. Maintenance activities would be similar to residential yard noise and would not substantially increase ambient noise conditions.

Operation of the proposed project would not expose persons to or generate noise levels in excess of standards established in the City's General Plan or Municipal Code, and would not result in a significant impact associated with a permanent increase in ambient noise levels above those existing without the project. These operational impacts would be **less than significant** and will not be further addressed in the EIR.

## **12b) Less than Significant Impact with Mitigation Incorporated.**

### Construction Vibration

Ground-borne vibration from construction activities at the project site could produce vibration at nearby sensitive receptors. Pile driving, blasting, and other special construction techniques which typically cause ground vibration and groundborne noise are not proposed for demolition or construction of the proposed project. Ground-borne vibration propagation from large construction equipment, at near enough distances to the studied receiver, would not expose nearby buildings to significant building vibration, but could exceed the human annoyance threshold if not mitigated.

Typical reference vibration levels for a large bulldozer are 0.089 PPV<sup>9</sup> (inches/second) and 87 VdB at 25 feet (Federal Transit Administration, 2006). With the nearest sensitive receptor 15 feet away from the proposed project boundary, construction activities occurring near the boundary of the project site would not expose the nearby residential buildings to significant building vibration (exceeding 0.2 PPV or 94 VdB). However, construction activities could exceed the human annoyance (exceeding 80 VdB) standard at 15 feet. Mitigation Measure NOI-2 would restrict operation of large construction equipment to minimize impacts on surrounding sensitive receptors.

***Mitigation Measure NOI-2: Limitations on Construction Activities Generating Excessive Vibration.*** To reduce groundborne vibration impacts due to construction, the applicant shall include the following measures in contractor specifications and such measures shall be implemented by the contractor during construction:

- *The contractor shall comply with the construction hours identified in Mitigation Measure NOI-1 to limit hours of exposure.*

<sup>9</sup> Construction vibration is assessed in terms of Peak Particle Velocity (PPV). PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal. Ground-borne vibration related to human annoyance is generally related to root mean square (rms) velocity levels expressed in VdB.

- *Impact pile-driving shall be avoided where possible. Drilled piles cause lower vibration levels where geological conditions permit their use.*
- *Use of vibratory rollers and tampers shall be minimized or avoided near sensitive areas.*

With implementation of Mitigation Measure NOI-2, groundborne construction vibration would reduce potential annoyance at nearby residences to the extent feasible. With implementation of Mitigation Measure NOI-2, the proposed project would not result in generation of excessive groundborne vibration, or exposure of people to excessive groundborne vibration, and the construction impact would be **less than significant with mitigation**. This impact will not be further addressed in the EIR.

*Note that potential impacts of vibration on the integrity of the existing house and tankhouse structures that would be relocated as part of the proposed project will be addressed in relation to architectural historic resources, within the EIR for the project. Such potential impacts (if any) relate to the eligibility of the structures as a historical resource and consistency with Secretary of the Interior Standards for the Treatment of Historic Properties (if applicable), and not to the generation of excessive groundborne vibration or exposure of people to excessive groundborne vibration. These matters will not be further discussed in this Initial Study.*

#### Operational Vibration

Long-term operation of the project would be for typical residential purposes and would not result in any major sources of vibration. As a result, there would be **no impact** with respect to vibration from operation of the project and this impact will not be further addressed in the EIR.

#### **12e), 12f) No Impact.**

As described earlier under Items 8e and 8f, there are no public or private airports within two miles of the proposed project, and the proposed project is not within an airport land use plan. Therefore, there would be **no impact** in relation to airports and exposing people residing or working in the project area to excessive noise levels, and this impact will not be further addressed in the EIR.

#### **References:**

City of Fremont, 2011. General Plan Safety Element. Adopted 2011.

City of Fremont, 2013. Warm Springs / South Fremont Community Plan Draft EIR.

City of Fremont. 2017. Fremont Municipal Code.

Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment. May 2006.

## 4.13 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13.a. Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13.b. Displace substantial numbers of existing housing, necessitating the construction of replacement house elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13.c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

Since 2000, the City of Fremont's rate of growth has been the slowest in its history, at a rate of about 0.5 percent per year, or approximately five percent for the 10-year period (2000 to 2010) (City of Fremont, 2014). This growth rate was comparable to growth in Alameda County as a whole, but was slower than that of individual cities such as Santa Rosa, Pleasanton, San Jose, Sunnyvale, and Milpitas (City of Fremont, 2014). As of January 1, 2017, the California Department of Finance (DOF) estimates the City of Fremont's total population was 231,664 persons, which is an 8.2 percent increase from the City's 2010 population of 214,089 persons (DOF, 2017).

### Discussion:

#### 13a) No Impact.

##### Construction

An estimated maximum of 50 construction employees would be required for construction of the proposed project. Construction would begin in June 2018 and would require a total of approximately 20 to 24 months to complete. The source of the construction labor force is unknown at this time, but workers would likely come from the local labor pool and not relocate to the City from other areas. Therefore, there would be **no impact** from construction of the project on population growth, and this impact will not be addressed further in the EIR.

##### Operation

The project would not directly induce substantial unplanned population growth in the City of Fremont. The proposed project is consistent with the residential density prescribed for the project site as envisioned under the City's General Plan and would not result in a number of housing units beyond that at the high end of the density range (proposed 17 additional units versus maximum allowable of 23 units).

The proposed project would be expected to increase the population in the City of Fremont through the construction of 17 new single-family residences, and refurbishment of the existing, unoccupied home. The proposed project could result in approximately 56 new residents<sup>10</sup>. However, this additional population is consistent with that anticipated by the General Plan and, thus, within the City's future growth forecasts.

In addition, the proposed project would not induce substantial population growth indirectly (through the extension of roads or other infrastructure). The project site is an infill site surrounded by existing development, and there would be no extension of infrastructure to serve the site. Proposed site access

<sup>10</sup> Based on the DOF's 2017 estimate of 3.11 persons per dwelling unit and 18 proposed dwelling units, the proposed project is estimated to accommodate 56 new residents at buildout.

would be from a new private cul-de-sac off Ursa Drive, with three shared driveways. The proposed project would not require extensions of Ursa Drive or other existing roadways in the vicinity of the project site. Any new utility infrastructure required to serve the proposed project would be sized to accommodate project-related demands and would not be intended to serve any development on lands other than the project site.

As a result, the project would have **no impact** related to inducing substantial growth in the City of Fremont, and this impact will not be further addressed in the EIR.

### 13b, 13c) No Impact.

The property currently contains an unoccupied house that is eligible for historic listing, which would be relocated on the project site. Therefore, the project would have **no impact** related to the displacement of substantial numbers of people or existing housing that necessitates the construction of replacement housing elsewhere, and these impacts will not be further addressed in the EIR.

### References:

California Department of Finance (DOF), 2016. *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2016*. Available: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>. Accessed April 26, 2017.

City of Fremont, 2014. General Plan Housing Element 2015-2023. Available: <https://fremont.gov/398/General-Plan>. Accessed April 26, 2017.

## 4.14 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14.a. 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:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

#### Fire Protection Services

Fire protection services in the project area are provided by the City of Fremont Fire Department. In 2015, the Fire Department responded to 2,204 medical and 243 fire emergencies. Emergency Medical Services (EMS) responses account for approximately 88 percent of all their responses (City of Fremont Fire Department, 2016). The City of Fremont strives to maintain a six-minute 40-second response time 90

percent of the time, for all emergencies located below the “Toe of the Hill”<sup>11</sup> (City of Fremont, 2011). The average response time is 3:59 minutes, which surpasses the City’s goal (City of Fremont Fire Department, 2015). The closest station to the project site is Station 5, located at 55 Hackamore Lane, which is approximately 1.2 miles to the northwest.

### Police Protection Services

Police protection services are provided by the City of Fremont Police Department. The Police Department deploys officers from three separate zones. The project site is located in Zone 3, which is the southern portion of Fremont. The City has one police station located at 2000 Stevenson Boulevard, which is approximately 11 miles north of the site. In 2015, there were a total of 337 violent crimes, 4,371 property crimes, and 60 highway crimes within the City (State of California Department of Justice, 2016).

### Schools

The project area is located within the service boundaries of Fremont Unified School District (FUSD). The elementary schools that would serve the project site are Warm Springs Elementary located at 47370 Warm Springs Boulevard, approximately one mile away, and James Leitch Elementary located at 47100 Fernald Street, approximately one mile away. The proposed project would also be served by John M. Horner Junior High at 41365 Chapel Way, approximately six miles away, and Irvington High School at 41800 Blacow Road, approximately six miles away. The FUSD intends to construct an as-of-yet named new elementary school within the Warm Springs Community Plan area, to accommodate the anticipated 430 elementary students resulting from residential development within the Warm Springs Community Plan area by the 2012/2022 school year (FUSD, 2015).

For enrollment years 2015-2016, James Leitch Elementary School, serving grades kindergarten through second, had 900 students and was not at capacity. Warm Springs Elementary, serving students grades 3 through 6, has a maximum capacity of 1,080 and current enrollment of 886. Horner Junior High School, serving grades 7 through 8, was at capacity with 1140 students. Irving High School, serving grades 9 through 12, has a maximum capacity of 2,310 and current enrollment of 2,253 (Lemos, 2017). The FUSD’s enrollment projection study anticipates an overall enrollment increase within the District of approximately 12.5 percent by the 2021/2022 school year. However, enrollment at James Leitch Elementary School will decline by 24 percent, and enrollment at Warm Springs Elementary will increase by 16 percent during this time period, due to the completion of the modernization of Warm Springs Elementary School in 2016/2017. Horner Junior High School and Irvington High School enrollments are anticipated to increase by 35 percent and 34 percent, respectively, by 2022 (FUSD, 2015).

### Parks and Other Public Facilities

Parks in the vicinity of the project site include Plomosa Park, approximately 150 feet east of the project site; Lone Tree Creek Park, 1,200 feet north of the project site; and Booster Park, 2,500 feet north of the project site. There are no other public facilities within five miles of the project area. The City maintains a parkland standard of five acres of parkland per 1,000 residents, and the park development impact fee for new residential development is based on maintaining this ratio (General Plan Policy 8-1.2) (City of Fremont, 2011).

### **Discussion:**

#### **14a.i), 14a.ii) Less than Significant Impact.**

### Construction

Construction of the proposed project could result in a small, temporary increase in the demand for fire suppression and emergency medical services and police services due to the temporary presence of construction personnel in the area. Project staffing levels for construction would vary with on-site

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<sup>11</sup> The “Toe of the Hill” refers to the City Council approved Toe-of-the-Hill line, which is approximately located along the base of the foothills, where the natural grade first becomes 20 percent or more. Areas above the Toe of the Hill are generally protected from future development.

activities, but is not expected to exceed 50 construction workers, and would be temporary. Federal and state worker safety regulations would be adhered to in order to minimize the likelihood of workplace injuries and accidents requiring emergency medical attention. Typical fire and safety precautions would be taken, such as, prohibiting on-site fires; reporting any fires, even if they have been extinguished; discarding any smoking materials in approved containers; maintaining access to emergency vehicles; and maintaining access to fire hydrants, emergency water tanks and emergency turnouts. Such activities would not necessitate construction of new fire protection or police facilities or impact emergency response times. Thus, construction of the proposed project would result in a **less than significant** impact related to fire protection and police services, and these impacts will not be further addressed in the EIR.

#### Operation

As discussed in Section 4.13, Population and Housing, the project would result in approximately 56 new residents on the project site. The associated increase in the demand for fire suppression, emergency medical services, or police services would not be substantial, and would be typical of the demand from the surrounding residential areas. Because the project site is an infill site, nearby services and patrols are already available, the proposed project would not generate an unusual demand for fire protection, emergency, or police services, the proposed project would not necessitate the construction of new fire protection or police facilities in order to maintain acceptable service ratios, response times, or performance objectives for fire and police services.

There is not expected to be an increase in the amount of hazards related to fires because the project would be required to comply with the California Building Code, Fire Code, Electrical Code, and Mechanical Code. Before issuing a permit, the City would review project plans to ensure that fire and safety measures are in compliance with state and local fire safety regulations. The Fire Department would be responsible for reviewing projects for adequate access for fire and emergency apparatus, design features (setbacks, clearances, etc.) and compliance with building and fire safety code requirements (City of Fremont, 2011). Additionally, City Fire Service Development Impact Fees (established by City Council Resolution in 1991) would further offset impacts on fire service from the proposed project.

Therefore, the project's operational impact on fire protection and police services would be **less than significant**, and these impacts will not be further addressed in the EIR.

#### **14a.iii) Less than Significant Impact.**

##### Construction

An estimated maximum of 50 construction employees would be required for construction of the proposed project. Construction would begin in June 2018 and would require a total of approximately 20 to 24 months to complete. Workers would likely come from the local labor pool and not relocate to the City from other areas and, therefore, would not increase enrollment in local schools. As such, there would be **no impact** from construction of the project on school facilities, and this impact will not be further addressed in the EIR.

##### Operation

The project would result in 17 new residences, and relocation and renovation of the existing house (which is currently vacant) on the project site. The development is anticipated to result in approximately 56 new residents. Based on the FUSD's student generation rates, the estimated future demand for schools as a result of the proposed development is a total of approximately 12 students over all grade levels. Table 4.14-1 shows the breakdown by grade level.

**Table 4.14-1**  
**Estimated Generation of Students from Proposed Project**

Grade Level	Student Generation Rate for Single-Family Detached Residential	Estimated Number of New Students from Proposed Project
K–6 (Elementary)	0.4237	8
7–8 (Middle)	0.0940	2
9–12 (High)	0.1553	3
<b>Total:</b>	<b>0.673</b>	<b>12</b>

Source: FUSD, 2015.

Note: sum of components may not equal the total value due to rounding.

Students generated by the proposed project would attend James Leitch Elementary School, Warm Springs Elementary School, Horner Junior High School, and Irvington High School. As stated above, FUSD anticipates that enrollment at all four schools will decline by 2022 (FUSD, 2015). Although the Horner Junior High School is currently at its enrollment capacity, the FUSD has indicated that Horner Junior High School would still accept students. In addition, FUSD has indicated that it would be able to accommodate new students within the existing elementary schools and high school (Lemos, 2017).

SB 50 (Chapter 407, Statutes of 1998) instituted a school facility program by which school districts can levy fees for the purpose of construction or reconstruction of school facilities. FUSD levies Level III developer fees. Effective May 1, 2017, the Level III fees are \$26.11 per square foot for residential construction (FUSD, 2017). The project applicant would pay the State-mandated school impact fees to the FUSD that are being levied at the time of development. The California Legislature has declared that payment of the State-mandated school impact fee is deemed to be full and adequate mitigation under CEQA (California Government Code Section 65996).

Because the project applicant would pay State-mandated school impact fees and FUSD has indicated that existing school facilities are capable of accommodating new students, the proposed project would not result in the need for new or expanded school facilities. The operational impact of the project on school facilities would be **less than significant**, and this impact will not be further addressed in the EIR.

**14a)(iv), 14a)(v) No Impact.**

Park acreage is sufficient to meet the City's goal of five acres of parkland per 1,000 residents. Based on the estimated 56 new residents generated by the proposed project, approximately 0.3 acre of parkland would be required to maintain the City's parkland standard. The City requires all new residential development to dedicate or develop parkland or pay in-lieu fees consistent with State law and the City's impact fee program (City of Fremont, 2011). Because the project applicant would dedicate parkland or pay in-lieu fees, the proposed project would not result in the construction of new recreational facilities or deterioration of existing recreational facilities. The project would not result in significant increased demand for other public facilities. Therefore, construction and operation of the project would have **no impact** on parks or other public facilities, and these impacts will not be further addressed in the EIR.

**References:**

City of Fremont, 2011. City of Fremont General Plan, Parks and Recreation Element Chapter 8 and Safety Chapter 10. Prepared for the City of Fremont.

City of Fremont Fire Department, 2015. City of Fremont Fire Department 2015 Annual Report. Prepared for the City of Fremont.

\_\_\_\_\_, 2016. Fire Chief's Message. Available: <http://fremont.gov/1320/Fire-Chiefs-Message>. Accessed: April 5, 2017.

\_\_\_\_\_, nd. Operations. Available: <https://fremont.gov/125/Operations>. Accessed: April 5, 2017.

City of Fremont Police Department, nd. Personnel Unit. Available:  
<http://www.fremontpolice.org/index.aspx?nid=180>. Accessed: April 6, 2017.

Department of Justice, State of California. Database *CJSC Statistics: Crimes and Clearances 2015 Statistics*. <https://oag.ca.gov/crime/cjsc/stats/crimes-clearances>. Accessed: April 6, 2017.

Fremont Unified School District (FUSD), 2017. Facilities and Construction Info on Developer Fees. Available: <http://www.fremont.k12.ca.us/Page/258>. Accessed May 24, 2017.

\_\_\_\_\_, 2015. Enrollment Projection Study. Prepared for Fremont Unified School District.

Lemos, Carol, 2017. Fremont Unified School District Facilities Department, personal communication, April 7, 2017.

US Census Bureau, 2015. QuickFacts Fremont City, California. Available:  
[Http://www.census.gov/quickfacts/table/PST045216/0626000](http://www.census.gov/quickfacts/table/PST045216/0626000). Accessed: April 6, 2017.

## 4.15 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15.a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15.b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting:

The City of Fremont's Recreation Services Division provides parks and recreation facilities and services to the City of Fremont. These facilities include four community centers, three program centers, various parks, a sports complex, tennis center, Fremont Park Golf Club, and Olive Hyde Art Gallery. The Recreation Services Division also provides access to a variety of classes and summer camps to its residents (City of Fremont, 2017a). The Park Maintenance and Urban Forestry Division is responsible for maintaining the City's 52 parks spanning 850 acres (City of Fremont, 2017b). The proposed project is located near three City parks:

- Plomosa Park is located approximately 150 feet northeast of the project site. Plomosa Park is classified as a linear park under the City's General Plan. The park runs from Scott Creek Boulevard to Plomosa Road, paralleling I-680.
- Lone Tree Creek Park is located approximately 1,200 feet north of the project site on Starlite Way. Lone Tree Creek Park is classified as a Neighborhood Park under the City's General Plan. The park includes a playground, basketball court and walking path.
- Booster Park is located approximately 2,500 feet north of the project site on Gable Drive and Hoyt Street. Booster Park is classified as a Neighborhood Park under the City's General Plan. The park includes a baseball diamond, playground, and walking path.

### Discussion:

#### 15a), 15b) Less than Significant Impact.

As discussed in Section 4.13, Population and Housing, the proposed project would result in an increase in population by approximately 56 residents. This limited population growth would not result in a

substantial increase in the use of existing parks and recreational facilities such that physical deterioration would be accelerated, or additional recreational facilities would need to be built. There would be no construction or expansion of any City recreational facilities as a result of the proposed development. The project would, therefore, have a **less than significant impact** on parks and recreational facilities, and these impacts will not be discussed further in the EIR.

## References

City of Fremont, 2011. City of Fremont General Plan, adopted December, 2011

City of Fremont, 2017a. City of Fremont Recreational Services, Available at <https://fremont.gov/259/Recreation-Services>, Accessed April 27, 2017.

City of Fremont, 2017b, City of Park Maintenance, Available at <https://fremont.gov/1254/Park-Maintenance>, Accessed April 27, 2017.

## 4.16 Transportation and Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16.a. Conflict with an applicable plan, ordinances 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16.d. Substantially increase hazards due to design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting:

The project site is located in the Warm Springs area of South Fremont and has its primary frontage along Ursa Drive, with the main area located along the west side of Ursa Drive at its intersection with Plomosa Way. Secondary site frontage (and existing site access) is provided along Warm Springs Boulevard. The site is located within the primarily residential area of Warm Springs, characterized by single-family homes within a narrow strip of residential subdivisions east of Warm Springs Boulevard and west of I-680.

The internal roadway network within this area is characterized by cul-de-sacs and limited connectivity across individual tracts that have been subdivided and developed. Primary local roadway access for the site is provided by Warm Springs Boulevard, via intersections at Tonopah Drive and Mayten Way. Warm Springs Boulevard provides connections to the larger regional roadway network, including SR 262, I-680 (via SR 262 or Scott Creek Road), and I-880 (via Warren Avenue or Dixon Landing Road). Warm Springs Boulevard is classified as a “Primary Arterial” in the City of Fremont General Plan (General Plan; City, 2011a), with the segment between Warren Avenue and the Fremont city limits serving average daily traffic (ADT) of approximately 22,000 vehicles (City of Fremont, 2015).

Local transit service in the area is provided by the Alameda–Contra Costa Transit District (AC Transit), which operates three bus lines along Warm Springs Boulevard in the vicinity of the project site (AC Transit, 2017). Primary service is provided by Line 217, which operates seven days a week and connects to the San Francisco Bay Area Rapid Transit District (BART) at Fremont Station and the Santa Clara Valley Transportation Authority (VTA) at the Great Mall/Main Transit Center in Milpitas. Supplementary service is provided weekdays by Lines 215 and 239, which connect to BART at both the Warm Springs/South Fremont Station and Fremont Station. Warm Springs/South Fremont Station is located approximately 2.4 miles north of the project site along the west side of Warm Springs Boulevard, just south of South Grimmer Boulevard. There are no other existing transit services or specific planned transit improvements in the immediate vicinity of the project site (AC Transit, 2015; 2016; 2017).

In the vicinity of the project site, Class II bikeways (bicycle lanes) are provided along Warm Springs Boulevard, connecting to Class II facilities along East Warren Avenue in the north and Class II/Class III facilities along Scott Creek Road/Kato Road in the south. Curbs and sidewalks are generally present along both sides of local streets within the Warm Springs residential area. However, major gaps are present along the west side of Warm Springs Boulevard, which is characterized by large lots occupied by office or light industrial buildings surrounded by surface automobile parking. Many of these lots were developed without constructing adjacent sidewalk segments along Warm Springs Boulevard. The Ursa Drive frontage of the project site is only partially improved with sidewalk, as the site is largely undeveloped aside from the old farmstead buildings on the site.

The draft City of Fremont Bicycle & Pedestrian Master Plan (City, 2017a) describes a vision for the City’s bikeway network—the All Ages and Abilities (AAA) Vision Network—that proposes several bikeway improvements in the vicinity of the project site, including Class IV facilities (separated bikeway) along Warm Springs Boulevard; a new Class I facility (bicycle path) along the Hetch Hetchy Trail running north–south through the Warm Springs residential area; and three east–west Class III facilities (bicycle routes) to link these two facilities, along Lippert Avenue, Starlite Way, and Tonopah Drive. The City of Fremont Pedestrian Master Plan also includes the Hetch Hetchy Trail as one of several proposed shared-use paths (City, 2016). Within the Warm Springs residential area, trail crossings would involve construction of crosswalks and curb ramps at intersections with local streets.

## **Discussion:**

### **16a), 16b)      Less than Significant Impact with Mitigation Incorporated.**

#### Construction

The average daily traffic generated by construction activities would be similar to the estimated daily traffic generated by the project upon completion of construction and full occupancy of all dwelling units on the site. On an average day, there would be approximately 30 construction workers at the site, increasing to a maximum of approximately 50 workers on peak days. While the project would involve construction of 17 new two-story single-family homes, the expected population of residents at full occupancy (when accounting for household size including parents/guardians, children, and others) would be similar to the estimated number of construction workers.

Construction activities at the site would also generate heavy vehicle trips, including trucks for off-site soil export (maximum of 25 daily trips), heavy equipment transport, or materials deliveries. Given the proximity of the project site to I-680 and I-880, construction trucks would have relatively direct routes. In general, however, truck trips would be spread out over the course of the work day, therefore, the majority

of construction-related traffic during the weekday AM and PM peak periods (typically, 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively) would be associated with construction worker trips. The impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of streets in the project site vicinity because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. This impact could be potentially significant; however, Mitigation Measure TRA-1 is proposed to minimize the impacts of construction-related traffic.

- **Mitigation Measure TRA-1: Construction Traffic Management Plan.** *The project applicant and its construction contractor shall prepare and implement a traffic management plan for construction activities that may affect road rights-of-way during construction, to reduce traffic congestion during construction and facilitate travel of emergency vehicles on affected roadways. The traffic management plan must follow applicable City of Fremont Standards Details (whichever edition is current as of the date of construction). The traffic management plan shall be submitted to the City of Fremont Public Works Department for review and approval before the approval of improvement plans and issuance of building permits where roadway improvements may cause impacts on traffic. The traffic management plan shall be implemented throughout construction. The plan shall include at least the following items and requirements:*
  - *A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, warning signs, cones for drivers, use of flag persons to direct traffic flows when needed, and designated construction access routes;*
  - *Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;*
  - *Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur;*
  - *Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant; and*
  - *Methods to ensure continued access by emergency vehicles. During project construction, access to the existing surrounding land uses shall be maintained at all times, with detours used, as necessary, during road closures.*

Implementation of Mitigation Measure TRA-1 would reduce the significant impact associated with construction-related traffic to a **less-than-significant** level by requiring preparation and implementation of a construction traffic management plan. This impact will not be further addressed in the EIR.

### Operation

**Congestion Management Plan:** The Alameda County Transportation Commission's (ACTC) Congestion Management Program (CMP) describes performance measures related to the circulation system (ACTC, 2015), as summarized below, although only some of these would be directly applicable to the project. These performance measures are described in further detail in the CMP.

- Multimodal accessibility and transportation/land use integration (mode share – walk trips, mode share – school trips, mode share – other trip purposes, mode share – transit access trips, VMT per capita, travel time – work trips, land use approvals in PDAs, land use approvals within half-mile of transit);
- Roadways (travel times, vehicle throughput, person throughput, travel speeds / levels of service, HOV or HOT lane travel time competitiveness, person-hours of delay, bottlenecks and queues, pavement condition index, collisions, travel time index, and ITS infrastructure);

- Transit service (travel times, ridership, service utilization, load factor, commercial speed, on-time performance, cost effectiveness, service interruptions, transit fleet age, public transit accessibility, and environmental quality);
- Bicycling (counts at multiple locations, collisions involving bicycles, bicyclist collision severity, local master plan adoption, miles of network built, community members participating in programs, countywide funds devoted to bicycling, counts at a single location, and environmental quality);
- Walking (counts at multiple locations, collisions involving pedestrians, pedestrian collision severity, local master plan adoption, number of pedestrian projects complete, countywide funds devoted to walking / pedestrians, schools with Safe Routes to School programs, counts at a single location, and environmental quality);
- Goods movement (GHG emissions, air quality, equity, travel-time delay, buffer time index, truck-involved crashes, rail crashes, freight infrastructure conditions, resiliency, use of innovative technology, multimodal connectivity and redundancy, coordination with passenger transportation, compatibility with land-use decisions, jobs and economic impact, and truck route design compatibility); and,
- Environment, equity, and health (activity center accessibility, physical activity, GHG emissions, and PM<sub>2.5</sub> emissions).

Standard practice exercised by the City of Fremont typically requires a detailed transportation impact analysis (TIA) for projects generating 100 vehicle-trips or more during the weekday PM peak hour. This threshold is also consistent with the threshold used by ACTC for determining whether a land use project requires preparation of a TIA to evaluate potential impacts to regional roadways in the surrounding area that are designated as part of the CMP network. In the Warm Springs area, I-680, I-880, and Mission Boulevard/SR 262 between I-680 and I-880, are designated as part of the CMP roadway network.

The General Plan establishes variable level of service (LOS) standards for traffic speed and travel delay based on street function, land use, and existing modes of transportation. The City has historically used an LOS threshold of LOS D for roadway design, which is roughly equivalent to operations at 85 to 90 percent of capacity during the weekday AM and PM peak hours. However, LOS E or LOS F may be “acceptable in some locations due to environmental, aesthetic, historic, or urban design objectives, or where regional traffic influences conditions” (City of Fremont, 2011a).

For signalized intersections outside of the City Center, Town Centers and the Warm Springs/South Fremont BART station area, an LOS D should be maintained for minor arterials and collectors streets and an LOS E for regional arterials. For locations within the City Center, Town Centers, BART station areas, and within PDA boundaries, peak hour LOS E or LOS F may be acceptable. For an intersection already operating at LOS E or LOS F an increase in average delay of more than four seconds would be considered significant. The City does not apply significance thresholds for unsignalized intersections, which are evaluated for signal warrants on an as-needed basis consistent with the California Manual on Uniform Traffic Control Devices (MUTCD) and City criteria. These impact thresholds are described in more detail in the Fremont General Plan Update Environmental Impact Report (City of Fremont, 2011a, 2011b).

**Other Plans, Ordinances, or Policies:** In addition to the performance measures described above, the City of Fremont Pedestrian Master Plan has specific quantifiable goals related to the effectiveness and performance of the pedestrian circulation system, including increasing pedestrian trips (as a percentage of all trips) from nine percent in 2007 to 15 percent by 2025, and reducing annual reported collisions between pedestrians and motor vehicles from 44.4 (five-year average for 2003–2007) to 22 by 2025 (City of Fremont, 2016).

**Project Travel Demand:** Based on trip generation rates published by the Institute of Transportation Engineers (ITE) for single-family detached housing (Land Use 210), the proposed project would generate an estimated 162 new weekday daily vehicle-trips, 13 weekday AM peak hour vehicle-trips, and 17 weekday PM peak hour vehicle-trips (ITE, 2012). Therefore, the project would fall well under the City and ACTC thresholds for projects for which a detailed TIA is required to evaluate potential transportation-

related impacts. The development intensity of the project is also consistent with existing development in the surrounding residential community and would conform to the General Plan land use designation for the site and surrounding area. Therefore, the project's impacts to intersection LOS and other performance measures as described above would be less than significant.

The project would be subject to the City of Fremont's traffic impact fee, which would be directed towards funding various intersection and roadway improvements identified in the General Plan and would further reduce any potential effects of the project on the circulation system (City of Fremont, 2017b).

**Site Access:** As described in Section 2.4, Access and Circulation, proposed access to individual lots on the site would primarily be provided by a new private cul-de-sac from Ursa Drive, with three shared driveways. The existing secondary frontage along Warm Springs Boulevard may be removed as part of the project, but may also be retained, either as private pedestrian access for the residential lots or vehicular access for Lot 10. The City of Fremont Department of Public Works would review the proposed site access improvements for consistency with applicable policies and standards, including the City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014).

Overall, the project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, nor with an applicable congestion management program. The operational impacts of the project would, therefore, be **less than significant** and will not be further addressed in the EIR.

**16c) No Impact.**

There are no airports within the City of Fremont. The closest airports by approximate distance from the project site are San Jose International Airport (seven miles), Moffett Federal Airfield (eight miles), and Hayward Executive Airport (10 miles). The project does not include any features that would affect air traffic patterns or otherwise affect air traffic operations or safety. Therefore, construction or operation of the project would have **no impact** on air traffic patterns, and this impact will not be further addressed in the EIR.

**16d) Less than Significant Impact.**

Proposed site access would be from a new private cul-de-sac off Ursa Drive, with three shared driveways (proposed Lots B, C and D) (see Figure 2-4 in Section 2, Project Description). The existing site access off Warm Springs Boulevard may be removed as part of the project and deeded to abutting private properties to the south. Alternatively, it may be retained to provide private pedestrian access for the proposed residential lots or possibly vehicular access for proposed Lot 10.

The City of Fremont Department of Public Works would review roadway improvements for consistency with the City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014), which provides design standards for cul-de-sacs. Therefore, impacts associated with increases hazards due to a design feature would be **less than significant**, and this impact will not be further addressed in the EIR.

**16e) Less than Significant Impact with Mitigation Incorporated.**

Construction

Any heavy vehicle traffic, such as haul trucks or flatbed trailers carrying equipment or materials, would be expected to use specified truck routes with adequate capacity and accommodations to handle such vehicles. As described in Section 2.7, Construction Activities and Schedule, site access during construction would be provided via the existing secondary frontage along Warm Springs Boulevard for heavy vehicles, unless precluded by construction activities, with all other access (e.g., construction workers) via Ursa Drive. Construction is expected to last 20–24 months.

Ongoing construction activities along these roadways could result in temporary lane closures, increased construction truck traffic, and other roadway effects that could impede emergency access. The impact could be potentially significant, however, Mitigation Measure TRA-1, described above under Items 16a and 16b, would require preparation and implementation of a construction traffic management plan that would provide for adequate emergency access to the project site and surrounding area during construction activities. Implementation of Mitigation Measure TRA-1 would reduce the significant impact

associated with inadequate emergency access during construction to a **less-than-significant** level. This impact will not be further addressed in the EIR.

#### Operation

City General Plan Policy 3-3.6 (Road Hazards) calls for minimizing road hazards associated with overgrown vegetation, structures blocking sight lines, and other visual obstructions, and requires that new development be reviewed to ensure that ingress and egress locations, driveways, crosswalks, and other circulation features, are sited to minimize accident hazards.

The proposed project would be reviewed by the Fremont Fire Department and Fremont Police Department, prior to approval to confirm that the project would have adequate ingress and egress, incorporates requisite design features (setbacks, clearances, turning radii, etc.), and would not impede emergency access. The City of Fremont Department of Public Works would review roadway improvements for consistency with the City of Fremont Standard Details for Improvements in Public Right of Way (2014), which would ensure adequate access to the project site and individual residences.

The estimated travel demand generated by the project would also fall below the trip thresholds for which a detailed TIA is required to evaluate potential transportation-related impacts, and the project is not expected to result in substantial amounts of new vehicle traffic that could conflict with emergency vehicle access in the area. Furthermore, the project would not alter the existing street network, and emergency access to the site and surrounding area would generally continue to be provided as under existing conditions. Therefore, the project's operational impacts on transportation-related hazards and emergency access would be **less than significant** and these impacts will not be further addressed in the EIR.

#### **16f) Less Than Significant Impact with Mitigation Incorporated.**

##### Construction

As discussed above in relation to Items 16a and 16b, construction activities could result in temporary lane closures, increased construction truck traffic, and other roadway effects on roads in the vicinity of the project site and could result in temporary disruptions to transit, bicycle, and pedestrian circulation along Warm Springs Boulevard.

The impact could be potentially significant, however, Mitigation Measure TRA-1, described above under Items 16a and 16b, would require preparation and implementation of a construction traffic management plan, including identification of haul routes that would minimize impacts on motor vehicle, bicycle and pedestrian traffic, and implementation of comprehensive traffic control measures. Implementation of Mitigation Measure TRA-1 would reduce the impacts of construction-related traffic on transit, bicycle and pedestrian facilities to a **less-than-significant** level. This impact will not be addressed further in the EIR.

##### Operation

As described under the discussion of Items 16a and 16b, the project would be consistent with existing development in the surrounding residential community and would conform to the General Plan land use designation for the site and surrounding area. While the project site has a secondary frontage along Warm Springs Boulevard, primary access would be provided via Ursa Drive. The Warm Springs Boulevard frontage may be removed, or could be retained either as private pedestrian access or vehicular access for Lot 10. Overall, however, the project would not substantially conflict with existing or planned transit, bikeway, or pedestrian facilities along Warm Springs Boulevard given the expected increase in vehicle traffic associated with the project, as described under Items 16a and 16b. Even assuming that the secondary frontage on Warm Springs Boulevard is retained, the expected vehicle traffic associated with Lot 10 would not be large enough to create substantial conflicts with any such facilities.

The City of Fremont Department of Public Works would review roadway improvements for consistency with the City of Fremont Standard Details for Improvements in Public Right of Way (2014), which include design standards for street geometrics including travel lane width and sidewalk width. As described under the discussion of Items 16d and 16e, General Plan Policy 3-3.6 (Road Hazards) calls for minimizing road

hazards and requires that new development be reviewed to ensure that circulation features are sited to minimize accident hazards, including hazards for bicyclists and pedestrians.

Overall, given the project's estimated travel demand and the other considerations described above, the project would not include design features or uses or substantially increase traffic activity, transit ridership, bicycle activity, or pedestrian activity such that it could conflict with the performance or safety of existing or planned transit, bicycle, or pedestrian facilities. Therefore, this operational impact would be **less than significant** and will not be addressed further in the EIR.

#### References:

- Alameda-Contra Costa Transit District (AC Transit), 2017 (March). [System Map]. Prepared by Eureka Cartography. Available online: [http://www.actransit.org/pdf/maps/version\\_35/city\\_map.pdf](http://www.actransit.org/pdf/maps/version_35/city_map.pdf).
- AC Transit, 2016 (July). *Major Corridors Study Final Report* (Draft). Prepared by WSP | Parsons Brinckerhoff. Available online: <http://www.actransit.org/wp-content/uploads/Draft-Final-MCS-Report.pdf>.
- AC Transit, 2015 (December 8). *Short Range Transit Plan: Fiscal Years 2014/15 through 2023/24*. Available online: [http://www.actransit.org/wp-content/uploads/SRTP-2016\\_Jan\\_Final.pdf](http://www.actransit.org/wp-content/uploads/SRTP-2016_Jan_Final.pdf).
- Alameda County Transportation Commission (ACTC), 2015 (October). *Congestion Management Program*. Available online: [http://www.alamedactc.org/files/managed/Document/17368/2015\\_Alameda\\_County\\_CMP.pdf](http://www.alamedactc.org/files/managed/Document/17368/2015_Alameda_County_CMP.pdf).
- City of Fremont, 2009. *Fremont Bikeway Map*. Available online: <https://www.fremont.gov/DocumentCenter/View/2913>.
- City of Fremont, 2011a. *City of Fremont General Plan* (Adopted December 2011). Available online: <https://fremont.gov/398/General-Plan>.
- City of Fremont, 2011b (July). *Fremont DRAFT General Plan Update Draft Environmental Impact Report* (State Clearinghouse No. 2010082060). Prepared by Lamphier-Gregory. Available online: <https://fremont.gov/DocumentCenter/Home/View/5810>
- City of Fremont, 2012. *City of Fremont Bicycle Master Plan* (Adopted by City Council January 17, 2012). Prepared by Alta Planning & Design. Available online: <https://www.fremont.gov/DocumentCenter/View/6919>.
- City of Fremont, 2014. *City of Fremont Standard Details for Improvements in Public Right of Way*. Available online: <https://fremont.gov/235/Standard-Details>. Accessed May 23, 2017.
- City of Fremont, 2015 (November 5). *Engineering and Traffic Survey for Speed Limits* (Final Report). Prepared by Kimley-Horn and Associates, Inc. Available online: <https://fremont.gov/DocumentCenter/View/29109>
- City of Fremont, 2016. *City of Fremont Pedestrian Master Plan* (Adopted by City Council December 13, 2016). Prepared by Alta Planning & Design. Available online: <https://www.fremont.gov/DocumentCenter/View/34685>.
- City of Fremont, 2017a (April). *City of Fremont Bicycle & Pedestrian Master Plan*. Prepared by Fehr & Peers. Available online: <https://www.fremont.gov/DocumentCenter/View/34761>.
- City of Fremont, 2017b. *Fee Schedule (With Developer Deposit Schedule); Master Resolution No. 8672 (Fees as amended through April 5, 2017)*. Available online: <https://fremont.gov/DocumentCenter/View/25240>
- City of Fremont, no date. *Design Guidelines for Small-Lot Single-Family Residential Developments*. Prepared by Van Meter Williams Pollack for the City of Fremont Development and Environmental Services Department. Available online: <https://fremont.gov/DocumentCenter/View/1105>.

Department of Justice, 2010 (September 15). *2010 ADA Standards for Accessible Design*. Available online: [https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards\\_prt.pdf](https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards_prt.pdf).

Institute of Transportation Engineers, 2012. *Trip Generation* (9th ed.).

## 4.17 Utilities and Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17.a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.c. Require or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.e. Result in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting:

#### Wastewater

The Union Sanitary District (USD) operates Alvarado Treatment Plant, and provides wastewater collection, treatment and disposal services to over 347,000 people in Fremont, Newark and Union City. The Alvarado Treatment Plant has a capacity of 33 million gallons per day (mgd), and in 2015 treated an average of 21.85 mgd (Union Sanitary District, 2016). The treatment plant provides both primary and secondary treatment. The District maintains over 800 miles of sewer lines and has 108,457 connections for residential living units (USD, 2016). There are a total of seven pump stations in USD's service area. Most of Fremont's wastewater goes to the Irvington Pump Station first, and is then conveyed to the Alvarado Treatment Plant.

#### Water Supply and Treatment

ACWD would provide water supply services to the project site. ACWD serves a population of approximately 349,000 people over 104.8 square miles in Fremont, Newark and Union City (ACWD, 2017). ACWD has developed an Integrated Resource Plan to manage water supply and ensure that current and future demands are met. ACWD has analyzed long-term water needs of the Tri-City area (Fremont, Newark, Union City) and has identified the most efficient ways to meet them. Through water saving strategies, demand has dropped by more than 25 percent from 1995, despite continued growth (ACWD, 2014).

The State of California's Urban Water Management Planning Act, Water Code Sections 10610 through 10656, requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to prepare and adopt an urban water management plan (UWMP) (ACWD, 2016). ACWD developed its UWMP 2015-2020 in 2016 which includes growth projections for the Tri-City up to the year 2040. According to the UWMP, the District estimates that future water demands for single-family residential uses to be 22,700 acre-feet per year (AF/yr) in 2020 and 22,600 AF/yr in 2040 (ACWD, 2016).

Approximately 50 percent of the water production is obtained from Niles Cone Groundwater Basin and 50 percent from Del Valle Reservoir. Approximately 70 percent of the water produced is for residential use. In 2014-2015 the average daily production was 34.3 mgd and the maximum day production was 52.2 million gallons (ACWD, 2015).

Water treatment is provided by the ACWD Water Treatment Plant No. 2 (WTP2). The sustainable production rate at WTP2 is 26 mgd (ACWD, 2017).

### Storm Drainage

The Alameda County Flood Control and Water Conservation District (ACFCWCD) provides flood protection to the project area via planning, designing, constructing and maintaining flood control projects, including natural creeks, channels, levees, pump stations, dams and reservoirs. The City of Fremont manages the municipal stormwater system. An existing catch basin is present in the southwest corner of the project site, which connects to the City's drainage system in Kansas Way. Catch basins and storm drainage facilities are also present along Ursa Drive.

### Solid Waste

The City delivers municipal solid waste to the Fremont Recycling and Transfer Station facility located at 41149 Boyce Road, where waste is sorted and recyclable materials are recovered. Waste is transferred to Altamont Landfill located at 10840 Altamont Pass Road in Livermore. The Altamont Landfill has a disposal capacity through 2025 at current disposal rates because of municipal programs to recover and divert waste in landfill. The Altamont Landfill has a maximum permitted throughput of 11,150 tons per day (tpd) (CalRecycle, 2017b).

The Alameda County Waste Management Authority, now known as Stopwaste.org, is responsible for developing and implementing a Countywide Integrated Waste Management Plan. This plan includes a Source Reduction and Recycling Element, a Nondisposal Facility Element and a Household Hazardous Waste Element (City of Fremont, 2011). According to data supplied by the Alameda County Waste Management Authority, the 2011 diversion rate for Fremont is 73 percent. This rate is above the diversion rate required by AB 939, which mandates jurisdictions to divert 50 percent of their landfill waste. The Fremont Recycling and Transfer Station facility has diverted more than 250,000 tons of recyclable materials since 2006. Alameda County is planning to establish a countywide composting facility, which would further improve Fremont's diversion rate (City of Fremont, 2011).

### **Discussion:**

#### **17a), 17b), 17e)            Less than Significant Impact.**

Wastewater services would not be available on the project site during construction activities. Thus, there would be no impacts related to wastewater treatment during construction activities. The operation of the project would generate wastewater from flushing, bathing, clothes washing, dish washing, and leaks associated with the 18 proposed residential units. Based on the proposed project population of 56 residents, wastewater generation from the project is anticipated to be less than 5,600 gallons per day<sup>12</sup>. The project would not require new or expanded wastewater treatment facilities because the projected wastewater generation from the proposed project is less than 0.1 percent of the available capacity at the

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<sup>12</sup> Based on a per capita wastewater generation rate of 100 gallons per day per capita, which is the highest average daily wastewater flow recorded for the years 1998 and 2007 at the San Jose/Santa Clara Water Pollution Control Plant, the closest wastewater facility for which per capita generation rates were available (City of San Jose, 2009).

Alvarado Treatment Plant. Additionally, wastewater generated by the project would be typical of residential developments in the area and would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board.

Water treatment is provided by ACWD. The sustainable production rate at WTP2 is 26 mgd (ACWD, 2017). As discussed under Item 17d below, the proposed project would utilize approximately 5,600 gallons per day of water, which is less than 0.03 percent of WTP2's production rate.

For the reasons discussed above, the proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Therefore, the project's impacts related to these utilities would be **less than significant**, and this impact will not be further addressed in the EIR.

### **17c) Less than Significant Impact.**

Physical impacts associated with construction of the proposed project, including stormwater facilities, are evaluated throughout this Initial Study.

Once constructed, the project site would generate increased stormwater runoff compared to existing conditions due to increased impervious area and require construction of new stormwater drainage facilities. Stormwater from the proposed residential lots would infiltrate locally or be conveyed to a project-built bioretention facility located in the southwestern corner of the site (proposed Lot E) before being discharged to the municipal drainage system. The proposed improvements would be required to include drainage control features in accordance with the requirements of the Municipal Regional Permit (MRP) and Clean Water Program (CWP) for Alameda County (a program that facilitates local compliance with the Clean Water Act), which would encourage on-site infiltration and reduce the magnitude of, and change the timing of, the peak runoff from the site. Stormwater would not be directed to the ACFCWCD flood control channel along the northern boundary of the site. Impacts related to water quality are discussed further in Section 4.9, Hydrology and Water Quality.

Implementation of the drainage controls required by MRP and CWP for Alameda County would avoid or minimize potential effects related to the contribution of substantial amounts of additional runoff to the municipal storm drain system. Construction and expansion of new storm water drainage facilities outside of the project site would not be required. Therefore, the project's impacts on the municipal drainage facilities would be **less than significant**, and this impact will not be further addressed in the EIR.

Impacts associated with changes in existing drainage patterns, increased stormwater runoff that could exceed the capacity of stormwater drainage systems, and other water quality effects are addressed in Section 4.9, Hydrology and Water Quality.

### **17d) Less than Significant Impact.**

The proposed project would increase the water demand from ACWD by approximately 5,600 gallons per day (gpd) or 2.04 million gallons per year (MGY)<sup>13</sup>. The estimated project water demand would be 6.27 AF/yr, or less than 0.03 percent of the overall water demand for single-family residents in the District in the year 2020. Similarly, the estimated project water demand would be less than 0.02 percent of ACWD's average daily production.

Additionally, the project would utilize plants that require little water. The proposed project's landscaping plan (Design Focus, 2016) shows 75 percent of the proposed street and front yard landscaping areas would have low water use, and 25 percent the proposed landscape would have low to medium water use.

Since the projected water demand of the proposed project has already been accounted for in the UWMP, based on projected population and water demand in the District, sufficient water supplies are available to serve the proposed project from existing entitlements. No new or expanded entitlements are required to

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<sup>13</sup> Calculation is based on a projected project population of 56 residents and 100 gallons per day per capita water use (water use rates adjusted from ACWD, 2016. Urban Water Management Plan 2015-2016).

accommodate the proposed project's water supply demand; therefore, the project's impact on the water supply would be **less than significant**. This impact will not be further addressed in the EIR.

#### 17f) **Less than Significant Impact.**

##### Construction

During construction, solid waste would be generated from demolition of existing structures (barn, garage and fruit processing building) and a variety of construction materials used to build the new residences, such as asphalt, concrete, scrap wood, scrap metal, brick, mortar, sheet rock, packing and rubble. The project would be required to comply with the City's Construction and Demolition Debris Recycling Ordinance (No. 11-2008, Section 2, 9-2-08). The Ordinance requires 100 percent of asphalt and concrete and 50 percent of all remaining debris to be reused or recycled (City of Fremont, 2010). A Waste Handling Plan must be approved before permits are issued and work commences. Additionally, a Debris Diversion and Disposal report must be submitted within 30 days of completion and receipts to show that recycling requirements were met. Thus, impacts during construction on landfill capacity would be **less than significant**, and this impact will not be further addressed in the EIR.

##### Operation

Operation of the project would increase the amount of solid waste being produced and disposed of in Altamont Landfill. Therefore, the estimated<sup>14</sup> solid waste generation for the project is approximately 0.11 tpd, which is less than 0.001 percent of the landfill's maximum permitted throughput. Altamont Landfill would, therefore, be expected to accommodate the solid waste generated by the project. Thus, impacts during operation of the project on landfill capacity would be **less than significant**, and this impact will not be further addressed in the EIR.

#### 17g) **Less than Significant Impact.**

The project would not conflict or interfere with the City's ability to implement its adopted solid waste management programs and policies, such as City Ordinance No. 11-2008, Section 2, 9-2-08. Waste collection services for the proposed project would be provided weekly by Republic Services. The project would be subject to existing requirements regarding recycling and waste disposal. Since waste disposal in Fremont complies with federal, State and local requirements, the proposed project would not violate any federal, State or local regulations related to solid waste. Thus, the project's impacts would be **less than significant**, and this impact will not be further addressed in the EIR.

#### References

Alameda County Water District, 2017. ACWD Fact Sheet. Available: <http://acwd.org/index.aspx?nid=93>. Accessed: April 14, 2017.

\_\_\_\_\_, 2016. Urban Water Management Plan 2015-2020. Prepared for the Alameda County Water District. Available: <http://www.acwd.org/DocumentCenter/View/1264>.

\_\_\_\_\_, 2014. Integrated Resources Planning at the Alameda County Water District. Prepared for the Alameda County Water District. Available: <http://www.acwd.org/DocumentCenter/View/585>.

CalRecycle, 2017a. Jurisdictional Diversion/Disposal Rate Report. Fremont. Available: <http://www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=167&Year=2015>. Accessed: May 16, 2017.

\_\_\_\_\_, 2017b. Solid Waste Information System. Facility/Site Summary Details: Altamont Landfill and Resource Recovery (01-AA-0009). Available: <http://www.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0009/Detail/>. Accessed May 16, 2017.

<sup>14</sup> Based on an estimated project population of 56 residents, and a residential solid waste generation rate for the City of Fremont of approximately 4.2 pounds per resident per day, or 0.002 tons per day (CalRecycle, 2017a).

City of Fremont, 2010. Construction and Demolition Debris Recycling Ordinance. Available: <https://fremont.gov/DocumentCenter/Home/View/2870>. Accessed: April 14, 2017.

City of Fremont, 2011. City of Fremont General Plan, Public Facilities Chapter 9. Prepared for the City of Fremont.

City of Fremont, 2017. Development Submittal Requirements. Available: <https://fremont.gov/482/Development-Submittal-Requirements>. Accessed: April 26, 2017.

Union Sanitary District, 2016. About Us. Available: <http://www.unionsanitary.com/about-us>. Accessed: April 14, 2017.

## 4.18 Mandatory Findings of Significance

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18.a. Does the project have the potential to 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, 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.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 probably future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion:

#### 18a) Potentially Significant Impact.

Based upon background research, site visits, and the analysis herein, the proposed project does not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed above in Section 4.4, Biological Resources, compliance with standard development regulations codified in the FMC Chapter 18.218 would reduce such impacts on biological resources to **less than significant**.

The Initial Study has identified that the project could have **potentially significant** impacts in relation to historical architectural resources, as discussed above in Section 4.5, Cultural Resources. These impacts will be analyzed in the EIR.

#### 18b) Potentially Significant Impact.

Cumulative impacts, other than those related to historical architectural resources, would be less than significant or the project would result in a less than cumulatively considerable contribution to cumulative impacts. Cumulative impacts related to historical architectural resources will be analyzed in the EIR.

**18c) Less than Significant Impact with Mitigation Incorporated.**

Based upon background research, site visits, and the analysis herein, construction of the proposed project could potentially cause substantial adverse effects on human beings in relation to hazardous materials, water quality and noise. However, mitigation measures designed to minimize construction-related environmental effects in relation to these topics are listed in the relevant sections of this Initial Study, and such mitigation measures would reduce the potential impacts to a less-than-significant level. All other construction-related environmental impacts would be less than significant. No significant operational impacts that might cause substantial adverse effects on human beings are anticipated from the project.

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## Appendix A Air Quality and Greenhouse Gas Modelling Assumptions and Outputs

Appendix A: Air Quality and Greenhouse Gas Modeling Assumptions and Outputs is available for review at the City of Fremont Development Services Center at 39550 Liberty Street, Fremont, CA or on the City's website at: <http://www.fremont.gov/ceqa>.

