

CITY OF UNION CITY, CALIFORNIA

# **Seven Hills Estates Subdivision Project**

INITIAL STUDY &  
MITIGATED NEGATIVE DECLARATION

NOVEMBER 2020



# Seven Hills Estates Subdivision

## Initial Study/Mitigated Negative Declaration

### TABLE OF CONTENTS

	<u>Page</u>
Summary Information .....	1
Description of the Project .....	2
Environmental Factors Potentially Affected .....	14
Determination .....	15
Evaluation of Environmental Impacts .....	17
I. Aesthetics .....	17
II. Agricultural Resources .....	25
III. Air Quality .....	27
IV. Biological Resources .....	38
V. Cultural Resources .....	48
VI. Energy .....	54
VII. Geology and Soils .....	56
VIII. Greenhouse Gases .....	62
IX. Hazards and Hazardous Materials .....	66
X. Hydrology and Water Quality .....	70
XI. Land Use and Planning .....	83
XII. Mineral Resources .....	86
XIII. Noise .....	88
XIV. Population and Housing .....	92
XV. Public Services .....	93
XVI. Recreation .....	98
XVII. Transportation .....	99
XVIII. Tribal Cultural Resources .....	102
XIX. Utilities and Service Systems .....	103

	<u>Page</u>
XX. Wildfire .....	112
XXI. Mandatory Findings of Significance .....	115
Report Preparation .....	116
Mitigation Measures .....	117

## LIST OF FIGURES

	<u>Page</u>
Figure 1 Project Site Location .....	3
Figure 2 Aerial Overview of Site and Surroundings .....	4
Figure 3 Proposed Site Plan/Tentative Tract Map.....	5
Figure 4 Construction Access and Parking Plan .....	9
Figure 5 Existing Site Conditions .....	11
Figure 6 Existing Adjacent Conditions .....	12
Figure 7 Neighboring Land Uses .....	13
Figure AES-1 Vantage Points for Visual Simulations.....	20
Figure AES-2 Visual Simulation of Project from Viewpoint 1.....	21
Figure AES-3 Visual Simulation of Project from Viewpoint 2.....	22
Figure AES-4 Visual Simulation of Project from Viewpoint 3.....	23
Figure BIO-1 Biological Habitat Types on the Project Site .....	39
Figure CUL-1 Archaeological Subsurface Testing Locations in Relation to Proposed Project Features .....	53
Figure MR-1 Potential Mineral Deposits in Project Vicinity .....	87

## LIST OF TABLES

	<u>Page</u>
Table AQ-1 Estimated Unmitigated Construction Health Impacts on Existing Sensitive Receptors .....	34
Table AQ-2 Estimated Mitigated Construction Health Impacts on Existing Sensitive Receptors .....	35

# California Environmental Quality Act (CEQA) Environmental Checklist Form

**1. Project Title:** Seven Hills Estates Subdivision

**2. Lead Agency Name and Address:**

City of Union City  
Economic & Community Development Department  
34009 Alvarado-Niles Road  
Union City, CA 94587-4497

**3. Contact Person and Phone Number:**

Binh Nguyen, Assistant Planner  
(510) 675-5382  
[binhn@unioncity.org](mailto:binhn@unioncity.org)

**4. Project Location:**

Assessor's Parcel Number (APN): 87-34-2-7

The project site is located at the northeastern edge of the City of Union City at the southern terminus of Florence Street, about 300 feet east of Riviera Drive. Access to the site is provided via Appian Way and State Highway 238 (Mission Boulevard). Regional access is provided by Interstate 880, located approximately 3 miles to the southwest.

**5. Project Sponsor's Name and Address:**

Venkateswara Vaddineni  
6385 El Paseo Drive  
San Jose, CA 95120

**6. General Plan Designation:**

R3-6 (Residential, 3 to 6 Dwelling Units per Acre)

**7. Zoning:**

RS 6000-H (Single-Family Residential, Hillside Combining)



## **8. Description of Project:**

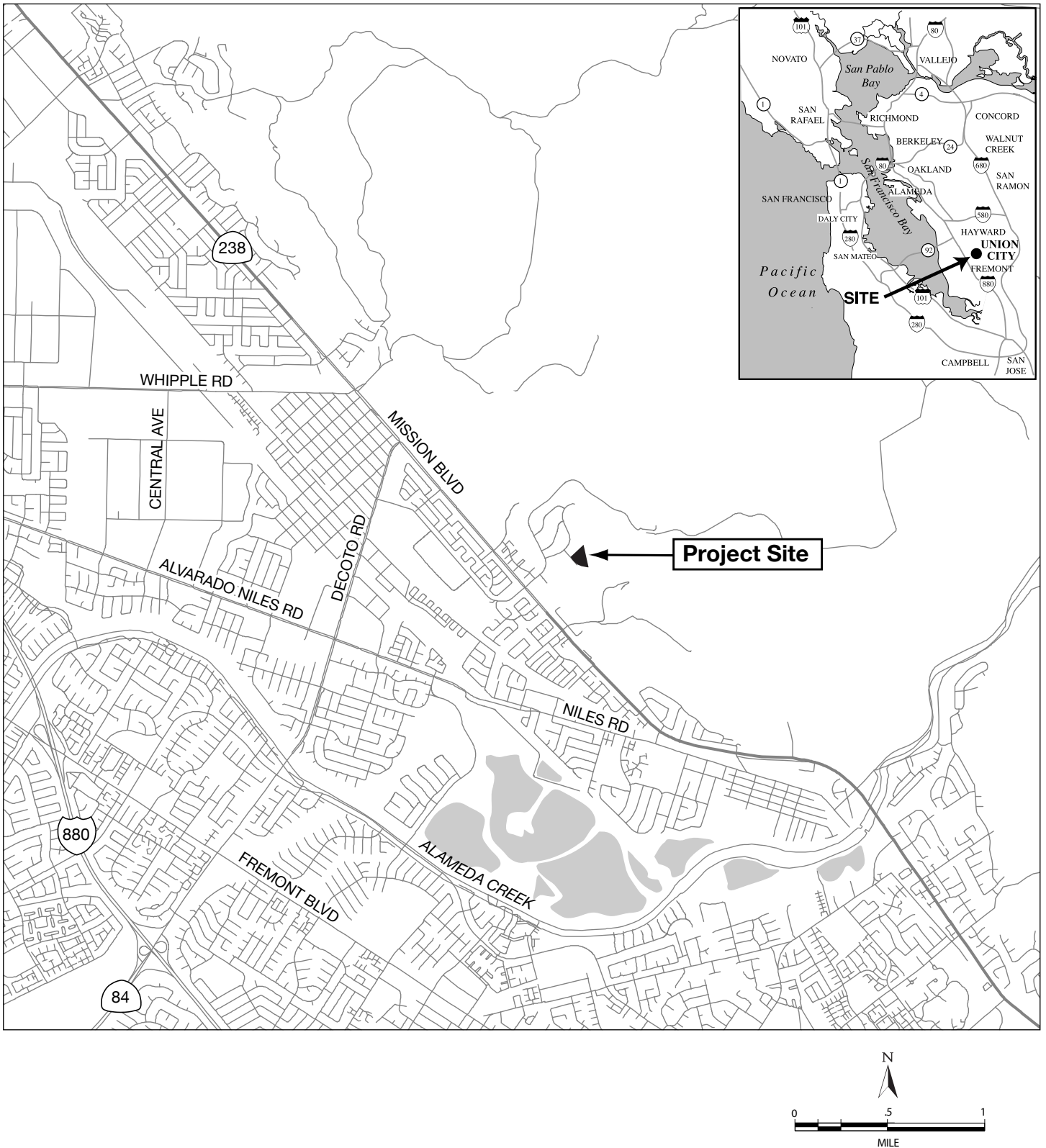
The proposed project that is the subject of the environmental review summarized in this Initial Study would consist of creation of a six-lot residential subdivision of custom single-family homes on a 6.01-acre property in the eastern hills of the City of Union City, adjacent to Seven Hills Park. The location of the project site is shown on Figure 1 and an aerial overview of the site and its surroundings is shown on Figure 2. The proposed site plan and Tentative Tract Map is shown on Figure 3.

The project would subdivide the currently vacant hilly 261,585-square-foot property into six lots ranging in size from 14,363 square feet to 53,820 square feet. A new private street would extend into the lower portion of the site from existing Florence Street, which currently doglegs to the southwest into Seven Hills Park; the park abuts the southwesterly edge of the project site. The proposed street would be extended from the point where Florence Street makes a 90-degree turn at the dog leg, adjacent to the southwestern corner of the project site, as shown on Figure 2. The proposed extension of Florence Street, which would extend approximately 350 feet, would terminate at a cul-de-sac and would have a curb-to-curb width of 36 feet, consistent with Union City standards. The roadway slope would range from 8 percent to 15 percent. Two fire hydrants would be installed on the north edge of the cul-de-sac, one between lots 1 and 2 and the other between lots 4 and 5. The cul-de-sac would have a diameter of 96 feet and a minimum turning radius of 48 feet, sufficient to accommodate an aerial ladder fire truck.

The proposed homes would all be located on the lower reaches of the hillside site and would be clustered around the northern and eastern sides of the street and cul-de-sac. The grading of the street and building pads would require 1,560 cubic yards of cuts and 2,597 cubic yards of fill, requiring the import of 1,037 cubic yards of fill material. The cut and fill slopes would be graded to a maximum slope of 3:1 (horizontal:vertical). The rest of the hillside site would remain in its natural condition, and a conservation easement would be established on this portion of the site. The roadway and cul-de-sac would be supported by concrete columns and/or retaining wall combination along the south side, with final design to be determined prior to issuance of a grading permit. Design specifications would be consistent with the recommendations presented in the geotechnical report, or as modified by the engineer of record based on site conditions.

The northwesterly lots 1 through 3, which would be accessed from the extended street, would have finished floor elevations ranging from approximately 201 feet to 213 feet above mean sea level (msl). The northeasterly lots 4 through 6, which would be accessed from the cul-de-sac, would have finished floor elevations ranging from approximately 211 feet to about 230 feet msl. With the exception of Lot 3, the building pads would be split into two levels. All of the proposed homes would provide two levels of living space, which in some cases would be split levels with short step-ups. On lots 4 and 5, the garage would comprise a third lower level, cut into the hillside.

The homes would range in size from 3,872 square feet to 5,787 square feet of living space, not including the garages, which would range from 721 to 1,005 square feet. The homes on lots 3, 4,



**Figure 1**

**Project Site Location**

Source: Douglas Herring & Associates





**Figure 2**

**Aerial Overview of Site and Surroundings**

Source: Google Earth





5, and 6 would have four bedrooms. Lot 1 would have a home with five bedrooms. The home on Lot 2 would have three bedrooms as well as a loft with an optional bedroom and an office that could instead function as a bedroom. The Lot 6 home would have four bedrooms but would include additional rooms, one designated as a theater and the other a large “bonus room” on the main living level. Each home would have a three-car garage that would provide side-by-side parking for three full-size vehicles, with the exception of Lots 1 and 3, which would utilize two tandem spaces in the parking layout.

Each home has been custom designed, with unique configurations and floor plans. Architecturally, the proposed styles would include modern, Italianate, Mission, and Mediterranean. All of the houses would be finished with stucco walls and most with tile roofs, though the modern homes would have composite roofs. The massing of the buildings would be quite articulated, and all would have a maximum height of 30 feet above finished grade, consistent with the zoning regulations for the RS 6000-H district in which the site is located.

Preliminary landscape plans for the front yards of the project show that each lot will have a unique landscape layout and planting pattern with various trees, shrubs, and groundcovers. The landscaping would be irrigated predominantly with drip irrigation, with rotors employed in some planting areas, according to the species. Irrigation efficiency would be regulated by electronic controllers appropriately programmed for the Union City climate and the species of plants being irrigated. As described in more detail in Section XIX-b, the landscaping would comply with the City’s Water Efficient Landscape Ordinance (WELO) and the City’s adopted Landscape Policy Standards Statement.

A portion of the undeveloped slopes above the homes would be maintained as a fire buffer area, depicted as “firebreak” on Figure 3, as required by the Alameda County Fire Department (ACFD). In addition, the City will require a scenic easement, or a similar recorded restriction in a form approved by the City Attorney, prohibiting development in the area beyond the fire break. The project will be conditioned to require formation of a Homeowners Association (HOA) that would be formed after the final subdivision map is recorded would be responsible for maintenance of this area, which will be regularly maintained. There would also be an easement pathway between Lots 5 and 6 to provide access to the fire buffer area for maintenance purposes.

The buffer area would be fenced, with an access gate and a path provided from Lot 5 to provide homeowners and maintenance workers access to the area. Per requirements of the ACFD, a Vegetation Management Plan would be prepared by a certified landscape architect or arborist prior to issuance of building permits. The Vegetation Management Plan would provide a framework for proper care and maintenance for the buffer area, and would identify the type of native plant landscaping needed between the houses and buffer area to provide protection against a fire.

Project construction is tentatively planned to commence in mid- to late-2021, with grading and site preparation expected to last up to eight months. Street, cul-de-sac, and all utilities would be

installed next and would take approximately six months to complete, after which construction of the homes would commence, requiring at least two years to complete. Installation of landscaping would require an additional three months, and would mark the completion of the project.

During most of the construction period, the staging and parking area would occur on the flat portion of the site on proposed Lots 1 and 2. During the first couple weeks of the project, the first slope of the street would be graded, which would allow vehicles and equipment to access the site. Prior to that, construction and worker vehicles would enter the site from an existing gate located midway on the southwestern edge of the fenced property, via the adjacent Seven Hills Park driveway. The area between the curb and gate would be re-graded as a temporary construction entrance. Prior to the grading of the new street, workers will enter the project site through this entrance and park inside and on the south side of the project site. Construction equipment would also be parked in this area. The location of the temporary entrance and onsite parking area are shown on Figure 4. Once the street extension is completed, the entrance road would have a maximum slope of 15 percent, which large construction vehicles would have no issues navigating.

An estimated eight to twelve construction workers are expected to be working at the site on a typical work day during the site grading and infrastructure buildout phases.

### ***Planning Approvals***

Vesting Tentative Tract Map: The project would require approval of a Vesting Tentative Tract Map by the City Council pursuant to Chapter 17.22 of the Union City Municipal Code.

Development Agreement: A Development Agreement to extend the Site Development Review approval up to 8 years from date of approval.

Site Development Review: The project would require Site Development Review approval by the City Council, pursuant to Section 18.76.045 of the Union City Municipal Code. The City Council would need to make findings that the proposed project is in compliance with the General Plan, the Zoning Ordinance, and the zoning regulations for the RS 6000 (Single Family Residential) zoning district in which the project is located.

Use Permit Approval: As the site is located in the -H, Hillside Combining District, the City Council would need to grant a Use Permit for the proposed development pursuant to Municipal Code Section 18.96.030 and a Use Permit for a Planned Unit Development for setback variations on one of the lots.

Final Subdivision Map: Within 24 months of the approval of a Vesting Tentative Tract Map, the project would require filing of a Final Subdivision Map, to be approved by the City Council, pursuant to Chapter 17.28 of the Union City Municipal Code unless an extension is granted pursuant to the Subdivision Map Act and the City of Union City Municipal Code.





## 9. Project Setting

The 6.01-acre wedge-shaped project site sits at the far northeastern edge of the City of Union City, at the base of a ridge of largely undeveloped hillsides that form a prominent visual backdrop to the cities of Hayward, Union City, and Fremont. Regional and local access to the site are identified in the summary information presented on page 1.

The site consists of a steeply sloped hillside covered in non-native grasses and weeds, as shown on Figure 5. Although the site is largely devoid of other vegetation, the northwestern portion of the site is dotted with coyote brush shrubs, some of which are dead or in poor condition; these shrubs are outside the proposed development area and would be retained in their current condition. Additionally, there are five trees growing along the property line in the southwest corner of the site, all of which would be removed to accommodate the proposed development.

There are no improvements on the site, which has never been developed. However, the historic remnants of an unimproved two-track trail cuts diagonally across a portion of the site. Elevations on the site range from 176 feet above mean sea level (msl) on the southwestern edge of the site to about 329 feet msl on the northeastern edge of the site. The site has an average slope of about 13.4 percent, but slopes on the site range from about 16 percent to 55 percent.

Seven Hills Park, a small community park with a basketball court, children's play equipment, and restrooms, abuts the southwestern edge of the project site (see Figure 6-b). (As discussed further in Section IV, Biological Resources, some of the park trees growing in proximity to the project site are proposed for removal by the project applicant to accommodate the proposed road extension.) The Seven Hills residential neighborhood (Figure 6-a) of more than 100 single-family homes abuts the northwestern edge of the site and extends to the northwest.

Mission Boulevard (State Highway 238) is located downhill from the project site, approximately 1,500 feet to the southwest. A small neighborhood commercial shopping center, shown on Figure 7, is located on the northeast corner of the intersection of Mission Boulevard and Appian Way. The development lining Mission Boulevard in the project vicinity is a mixture of single-family homes and multi-family residential developments, including the Mission Sierra apartment complex that is about 1,000 feet southwest of the project site.

The lands to the north and east of the project site consist of undeveloped open space hillsides, predominantly grasslands interspersed by riparian corridors with dense tree cover. Although the land south of the project site also largely consists of undeveloped open space, there is a large single-family home approximately 900 feet to the southeast (in Fremont) and a large unidentified warehouse-style building about 350 feet to the south.





a) Viewing northeast across the project site from approximate location of proposed street.



b) Viewing northwest across the project site toward the adjacent Seven Hills residential neighborhood.

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## Figure 5

### Existing Site Conditions

Source: Douglas Herring & Associates

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a) Existing residential development on Riviera Drive, just west of the project site.



b) Seven Hills Park, located immediately to the west of the project site.

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## Figure 6

### Existing Adjacent Conditions

Source: Douglas Herring & Associates

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a) Unidentified light industrial building adjacent to project site, approximately 350 feet to the south.



b) Entrance to the Seven Hills residential neighborhood, viewing toward Appian Way from Mission Boulevard. Neighborhood shopping center is shown on the right. The project site is located behind the distant band of trees in the center of the photograph.

## Figure 7

### Neighboring Land Uses

Source: Douglas Herring & Associates

## 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"/> Agricultural Resources        | <input checked="" type="checkbox"/> Air Quality    |
| <input checked="" type="checkbox"/> Biological Resources               | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy                    |
| <input checked="" type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> GHG Emissions                 | <input type="checkbox"/> Hazards & Haz. Materials  |
| <input type="checkbox"/> Hydrology/Water Quality                       | <input type="checkbox"/> Land Use/Planning             | <input type="checkbox"/> Mineral Resources         |
| <input checked="" type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing            | <input type="checkbox"/> Public Services           |
| <input type="checkbox"/> Recreation                                    | <input type="checkbox"/> Transportation/Traffic        | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems                     | <input type="checkbox"/> Wildfire                      |  |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance |  |  |

## DETERMINATION:

On the basis of the initial evaluation:

- ☐ 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 the 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 earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Binh Nguyen

Printed name

October 26, 2020

Date

Carmela Campbell

For

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## EVALUATION OF ENVIRONMENTAL IMPACTS:

Some of the analysis of environmental impacts presented in this Initial Study draws on and tiers from the environmental analysis the City of Union City recently performed for the newly-adopted *2040 General Plan*. Accordingly, the *2040 Union City General Plan Update Draft Environmental Impact Report* (State Clearinghouse No. 2018102057) is hereby incorporated by reference, pursuant to Section 15150 of the *CEQA Guidelines*. The Final Environmental Impact Report (EIR) was certified by the City Council on December 10, 2019, when the 2040 General Plan was also adopted. The General Plan EIR is available for review by the public at the City's Planning offices located at 34009 Alvarado-Niles Road in Union City. An electronic copy of the EIR can be downloaded at: <http://www.uc2040.com/documents/>. In instances where the General Plan EIR analysis was applied to the proposed Seven Hills Estates Residential Subdivision Project, it is explicitly so noted in the individual resource sections where the analysis was applied.

### I. AESTHETICS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Have a substantial adverse effect on a scenic vista?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** As shown on Figure 6-b, the project site is located mid-slope on the hillside ridge that forms the eastern visual backdrop to the City of Union City. These prominent hillsides, which reach elevations in excess of 1,400 feet above mean sea level (msl), are visible from miles away in locations where intervening terrain, vegetation, and/or existing development do not block the views. However, the project site is not visible from most publicly accessible offsite locations within 1 mile of the site, with the exception of from Seven Hills Park, located immediately to the south of the project site.

For purposes of this discussion, the undeveloped hillsides extending along the eastern edge of Union City are considered to constitute a scenic vista. Miriam-Webster Dictionary defines *vista* as a distant view through or along an avenue or opening. By this definition, the view of the site from Seven Hills Park would not be considered a scenic vista. Accordingly, the views of the site from Seven Hills Park are addressed separately in Section I-c, below.

Despite the project site's location within the City's scenic hillsides, due to its situation behind the dense band of trees depicted in the center of the photograph on Figure 6-b, as well as local terrain variations and intervening development and trees, the portion of the site proposed for development is generally not visible from publicly accessible offsite locations. Where the hillside above the site is visible from more distant locations, such as from the Interstate 880 overpass at Decoto Road, more than 3 miles away, the proposed development would remain screened by the trees growing in Seven Hills Park. Furthermore, were the proposed homes to be visible from this location, they would be barely discernible and would comprise a minutely small portion of the overall viewshed from such a distant vantage point. Additionally, the development would appear as a minor eastward extension of the adjacent, more expansive, existing Seven Hills neighborhood.

Thus, while the project would be developed on a site that is part of a scenic vista, with few offsite visual receptors able to perceive any changes to the hillsides, the project would not have a substantial adverse effect on a scenic vista. This would be a ***less-than-significant impact***.



	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** California's Scenic Highway Program was created by the Legislature in 1963, with the objective of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. They regulate land use and the density of adjacent development, restrict grading, govern the design and appearance of proposed development, restrict outdoor advertising, impose limitations on the use of landscaping, and guide site planning.

State scenic highways are so designated by the California Department of Transportation (Caltrans), following review of a request from a local city or county through which the roadway passes. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

Caltrans has not designated any scenic highways in the vicinity of the project site.<sup>1</sup> Therefore, the project would have **no impact** on scenic resources within a State scenic highway.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urban area, would the project conflict with applicable zoning and other regulations governing scenic quality?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The project site currently consists of an undeveloped hillside covered in grasses, dotted with shrubs in the northern corner, with a number of trees growing in the western corner of the site and along the southern edge of the site. As discussed in Section I-a, the site is surrounded to the north and east by a large ridge of hills that form a backdrop to Union City and constitute a scenic vista. However, the site itself is not particularly noteworthy from an aesthetic standpoint. As shown on Figure 5, it is a vacant hillside covered with non-native grasses that are dried out and brown during summer and fall months. There is a small area of coyote brush scrub habitat in the northern corner of the site, but many of the shrubs are dead, and they do not enhance the appearance of the site, which is devoid of trees except for five trees growing along the northwest edge of the site. The site is similar to livestock grazing habitat found throughout the hillsides that form the eastern backdrop to Union City and the neighboring cities of Fremont and Hayward. Although the vacant hillside does not have a great

<sup>1</sup> California Department of Transportation, Officially Designated State Scenic Highways, accessed January 2, 2020 at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.



deal of aesthetic appeal, because it remains in its original natural state, it has greater aesthetic appeal than, for example, a flat, vacant infill lot surrounded by urban development.

Implementation of the proposed project would transform the lower reaches of the hillside site from its current natural state to a small suburban neighborhood of attractive custom homes surrounded by trees and other landscaping, while the upper portions of the hillside would remain undeveloped, protected by a conservation easement. An extension of Florence Street would extend into the site approximately 350 feet, terminating in a cul-de-sac. Each home would feature a unique architectural style and layout, such that there would be no uniformity in the buildings. This, coupled with their placement at varying elevations and setbacks on the hilly site, would avoid completely any appearance of “cookie-cutter homes” or a uniform, unvarying streetscape.

While a dramatic transformation of the existing visual character of the lower portions of the site would result from project implementation, the change would not represent a substantial degradation of the visual quality of the site or its surroundings. The site is flanked on the north and west by residential development of single-family homes, and the proposed homes would be similar to and visually compatible with this existing development. There is potential for modification of views of surrounding residential development. However, changes to private views are generally not considered significant impacts under CEQA and, in any case, the proposed changes would not represent a substantial *degradation* of the visual character of the site, even though it would be a substantial *change*.

Visual simulations of the proposed project were prepared by Square One Productions in order to provide the community with a clear idea of how the site would be changed by the project. Consistent with the requirements of CEQA, viewpoints were selected in consultation with City staff that represented off-site public vantage points where the project would be the most visible. Three viewpoints were selected, shown on Figure AES-1. A viewpoint near the intersection of Mission Boulevard and Appian Way was selected due to the high volume of traffic on Mission Boulevard, with the potential for a large number of people to visually experience the project. There were very few public vantage points in relatively close proximity to the project site that provide a view of the site. Consequently, the two locations that were selected are quite close to the site: from within existing Florence Street, approximately 50 feet northwest of the site, and from within adjacent Seven Hills Park, close to the southern edge of the site.

The visual simulations were prepared from three-dimensional (3D) computer models drafted from AutoCAD files provided by the project architect. The simulated homes were appropriately scaled for superimposition into a three-dimensional computer model of the project site that reflects the post-grading topography of the site. They could then be inserted into baseline photos of the site showing existing conditions. Once the appropriate building massing was in place, architectural details were manually added to produce photo-realistic images of how the completed project would appear on the site. The simulations are shown on Figures AES-2 through AES-4.

Locations within Seven Hills Park would provide the most dramatic public views of how the project would transform the lower reaches of the site. As shown on Figure AES-2, park users stationed near the project site have an essentially unconstrained view of the adjacent portion of the site, as well as the upper hillside on the eastern side of the site. The homes on Lots 2, 4, and 6 would be the most prominent as viewed from the park, while the home on Lot 5 would be obscured and only the upper portion of the home on Lot 3 would be visible. These prominent views of the project would only be visible from within and around the park parking lot. From the playground and playing field areas, the homes would be predominantly screened by terrain and trees within the park.

As the site is viewed by offsite viewers from within or in proximity to the parking lot of the adjacent park, the development would be consistent with the existing residential development immediately to the north and west of the park. However, Seven Hills Park is a neighborhood park, not a regional park, and patrons of neighborhood parks do not have the expectation of a neighborhood park being





AES-1

Vantage Points for Visual Simulations

Source: Square One Productions





a) Existing conditions as viewed from Viewpoint 1 in Seven Hills Park.



b) Proposed project as viewed from Viewpoint 1 in Seven Hills Park.

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## Figure ASE-2

### Visual Simulation of Project from Viewpoint 1

Source: Square One Productions

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a) Existing conditions as viewed from Viewpoint 2 in Florence Street.



b) Proposed project as viewed from Viewpoint 2 in Florence Street.

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## Figure ASE-3

### Visual Simulation of Project from Viewpoint 2

Source: Square One Productions

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a) Existing conditions as viewed from Viewpoint 3 in 7th Street near Mission Boulevard.



b) Proposed project as viewed from Viewpoint 2 in 7th Street near Mission Boulevard.

## Figure ASE-4

### Visual Simulation of Project from Viewpoint 3

Source: Square One Productions

surrounded by natural undeveloped lands; neighborhood parks are typically surrounded by residential and/or other urban development. Park users desiring a more natural environment will venture outside the City to one of the many large regional parks located in Alameda County.

As shown on Figure AES-3, very little of the project would be visible from Florence Street northwest of the project site. The new development that would be visible from this location would be similar to the existing development flanking Florence Street, which is lined with single-family homes (similar to those depicted on Figure 5-a), though far less of it would be visible.

Viewpoint 3 (Figure AES-4), located on 7<sup>th</sup> Street just to the west of Mission Boulevard, is the public vantage point where by far the largest number of people would have visual access to the project site. This location was selected for having the greatest visual access to the site from a heavily traveled public location. Although there is a much higher volume of vehicle traffic on Mission Boulevard, the site is more obscured from every location along this roadway. From more distant vantage points to the west, the project site would comprise a minute portion of the total viewshed and the project site would not be discernible. Viewpoint 3 was selected as the closest public location where a large number of people would have some degree of visual access to the project site.

As shown on Figure AES-4, the project would be barely discernible from Viewpoint 3. (The site is located behind the band of trees that can be seen above the street sign and traffic light on Mission Boulevard at Appian Way.) Only a small portion of the roofs of two homes (one on the north side of the site and one on the south side of the site) would be visible at the edges of the band of trees obscuring most of the site. These changes are not at all readily apparent from Viewpoint 3; most viewers would likely have to visually search to even identify the changes to existing conditions. Even from this relatively close vantage point, the visible changes to the project site comprise a minute fraction of the total viewshed from Viewpoint 3. Therefore, implementation of the project would not substantially degrade the aesthetic qualities of the largely undeveloped hillsides that surround the project site. It is highly likely that the vast number of people driving past the area on 7<sup>th</sup> Street and Mission Boulevard would never notice that any visual changes have occurred.

In summary, the project would change the lower portion of the site from ruderal grassland to attractively designed and landscaped residential homes, generously spaced on large lots. These changes would not substantially degrade the visual quality of the site or its surroundings, and would not conflict with zoning or other regulations governing scenic quality. The project would have a ***less-than-significant visual impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The proposed homes would have interior lighting and exterior security lighting typical of all residential development. This would not constitute a new source of substantial light or glare, and the lighting would not adversely affect views in the area. The homes would not be finished in reflective surfaces other than windows, which do not comprise a substantial source of glare in residential developments. The project would have a ***less-than-significant impact*** related to glare or nighttime lighting.

**II. AGRICULTURAL RESOURCES** — *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment project and the Forestry Legacy Assessment project, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

**Explanation:** The project site is designated "Grazing Land" on the map of important farmland in Alameda County prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) by the Department of Conservation (DOC), a department of the California Resources Agency.<sup>2</sup> Seven Hills Park, located immediately to the south of the project site, and the existing residential development immediately to the west, are designated "Urban and Built-Up Land" on the FMMP map. The DOC updates the maps every two years; the most recent map was prepared in 2016 and published in 2018.

Grazing land is land on which the existing vegetation is suited to the grazing of livestock, but it is not considered protected agricultural land. By definition, "Urban and Built-Up Land" is not one of the categories of agricultural land defined by the FMMP, such as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, implementation of the project would have **no impact** on valuable farmland.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

**Explanation:** The project site is not zoned for agricultural use; it is zoned for residential use and is not under a Williamson Act contract.<sup>3</sup>

<sup>2</sup> California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, "Alameda County Important Farmland 2016" (map), August 2018.

<sup>3</sup> City of Union City, CommunityView Property Information, Parcel Detail: APN 87-34-2-7, accessed June 10, 2019 at: <http://maps.digitalmapcentral.com/production/vccommunityview/cities/unioncity/index.aspx>.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Neither the project site nor any of the surrounding lands are zoned as forest land.<sup>4</sup> The proposed project would therefore have no impact on forest or timber land.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Result in the loss of forest land or conversion of forest land to a non-forest use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Public Resources Code Section 12220(g) defines forest land as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. There is no forest land on the project site as defined in Public Resources Code Section 12220(g).

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed above, the project site does not contain farmland or forest land, and implementation of the proposed project would therefore have no potential to convert such lands to other uses.

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<sup>4</sup> *Ibid.*



**III. AIR QUALITY** — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

Explanation: The Bay Area Air Quality Management District (BAAQMD) adopted the current Bay Area Clean Air Plan (CAP) on April 19, 2017 in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gas (GHG) emissions in a single, integrated plan; and establish emission control measures to be adopted or implemented over the next three to five years.<sup>5</sup> The two closely-related primary goals of the 2017 Bay Area CAP are to protect public health and protect the climate. The plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan/Regional Climate Protection Strategy (CAP/RCPS) provides a roadmap for BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. The CAP/RCPS includes the Bay Area's first-ever comprehensive RCPS, which identifies potential rules, control measures, and strategies that the BAAQMD can pursue to reduce GHG in the Bay Area. Measures of the 2017 CAP addressing the transportation sector are in direct support of *Plan Bay Area 2040*, which was prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) and includes the region's Sustainable Communities Strategy and the 2040 Regional Transportation Plan.<sup>6</sup> The 2017 Clean Air Plan control strategy is based on four key priorities:

- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
  - ☐ Increase efficiency of our industrial processes, energy, and transportation systems.
  - ☐ Reduce demand for vehicle travel, and high-carbon goods and services.
- Decarbonize our energy system.
  - ☐ Make the electricity supply carbon-free.
  - ☐ Electrify the transportation and building sectors.

Targeting three major sectors, the control strategy includes the following key elements:

<sup>5</sup> Bay Area Air Quality Management District, *Final 2017 Clean Air Plan*, adopted April 19, 2017.

<sup>6</sup> Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area 2040*, adopted July 26, 2017, amended March 2018.

**Stationary Sources:**

- Decrease emissions of GHGs and criteria air pollutants through a region-wide strategy to reduce combustion and improve combustion efficiency at industrial facilities, beginning with the three largest sources of emissions: oil refineries, power plants, and cements plants.
- Reduce methane emissions from landfills, and from oil and natural gas production and distribution.
- Reduce emissions of toxic air contaminants by adopting more stringent thresholds and methods for evaluating toxic risks at existing and new facilities.

**Transportation:**

- Reduce motor vehicle travel by promoting transit, bicycling, walking, and ridesharing.
- Implement pricing measures to reduce travel demand.
- Direct new development to areas that are well served by transit, and conducive to bicycling and walking.
- Accelerate the widespread adoption of electric vehicles.
- Promote the use of clean fuels and low- or zero-carbon technologies in trucks and heavy-duty equipment.

**Buildings and Energy:**

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind, and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay Area.
- Promote energy and water efficiency in both new and existing buildings.
- Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The previous *Bay Area 2010 Clean Air Plan* identified 18 Stationary Source Measures (SSMs), 10 Mobile Source Measures (MSMs), 17 Transportation Control Measures (TCMs), six Land Use and Local Impact Measures (LUMs), and four Energy and Climate Measures (ECMs). The Air District and its partner agencies have taken action to implement the control measures in the *Bay Area 2010 Clean Air Plan*, with the result that eight of the 18 SSMs have been adopted in regulations or rules, and the remaining ten SSMs have been carried forward as part of the 2017 control strategy. Eight of the MSMs and all of the TCMs, LUMs, and ECMs have been carried forward in the current CAP. The 2017 CAP also adopts 30 new SSMs in addition to the eight carried over from the previous CAP. Additionally, BAAQMD identified a number of potential measures that appear to have merit but need further evaluation before they can be included as formal control measures. These measures have been included as further study measures (FSMs). The CAP identifies 11 FSMs, nine of them pertaining to stationary sources, along with one for buildings and one for agriculture. None of the CAP control measures are directly applicable to the proposed project.

When a public agency contemplates approving a project where an air quality plan consistency determination is required, BAAQMD recommends that the agency analyze the project with respect to the three questions listed below. If the first two questions are concluded in the affirmative and the third question concluded in the negative, the BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

1) *Does the project support the primary goals of the air quality plan?*

Any project that would not support the 2017 CAP goals would not be considered consistent with the 2017 CAP. The recommended measure for determining project support of these goals is consistency with BAAQMD CEQA thresholds of significance. As discussed further in the subsequent sections, the proposed project would not exceed the BAAQMD significance thresholds; therefore, the proposed project would support the primary goals of the 2017 CAP.

*2) Does the project include applicable control measures from the air quality plan?*

As noted above, none of the CAP control measures are directly applicable to the project.

*3) Does the project disrupt or hinder implementation of any 2017 CAP control measures?*

The project would not disrupt or hinder implementation of any 2017 CAP control measures.

Based on these answers, the proposed project would be consistent with the 2017 CAP. Therefore, the project would not conflict with or obstructing implementation of the applicable air quality plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: Air quality standards for the San Francisco Bay Area are set by the Bay Area Air Quality Management District (BAAQMD). They are based on the National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (USEPA) pursuant to the federal Clean Air Act (CAA), as well as the more stringent California Ambient Air Quality Standards (CAAQS) set by the California Air Resources Board (CARB).

BAAQMD's *CEQA Air Quality Guidelines* establish thresholds of significance for construction emissions of 54 pounds per day (lb./day) for reactive organic gases (ROG), fine particulate matter equal to or less than 2.5 microns (PM<sub>2.5</sub>), and nitrogen oxides (NO<sub>x</sub>), and 82 lb./day for respirable particulate matter equal to or less than 10 microns (PM<sub>10</sub>). The same thresholds apply to operational emissions. The construction particulate matter (PM) thresholds apply to exhaust emissions only, not ground disturbance; emissions from grading and other site disturbance, for which there is no adopted threshold of significance, are addressed through best management practices.

BAAQMD has developed both construction-related and operational screening criteria that provide lead agencies a conservative indication of whether a proposed project could potentially result in an exceedance of any of the thresholds of significance listed above. Because they were developed with very conservative assumptions, a project that falls below the screening criteria can be assumed to have no potential to exceed the adopted air quality thresholds of significance. For such projects, BAAQMD has determined that a quantified analysis of the project's potential emissions of criteria air pollutants and precursors is not necessary. The construction and operational screening criteria are discussed separately below.

As noted in BAAQMD's *CEQA Air Quality Guidelines*, air pollution is, by its very nature, largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively

significant adverse air quality impacts. The BAAQMD *CEQA Air Quality Guidelines* recommend that cumulative air quality effects from criteria air pollutants be addressed by comparison to the project-level daily and annual emission thresholds. These significance thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. According to the Air Quality Guidelines, if a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. The Air Quality Guidelines state that a project's emissions would be cumulatively considerable if they would exceed the significance thresholds identified above. Conversely, if a project is determined to have less-than-significant project-level emissions, then it would also have a less-than-significant cumulative air quality impact.

### **Construction Impacts**

Construction operations for any sizeable project have the potential to result in short-term but significant adverse air quality impacts. The BAAQMD recommends implementation of its Basic Construction Mitigation Measures by all projects subject to environmental review under CEQA.

The BAAQMD *CEQA Air Quality Guidelines* contain screening criteria for construction of a variety of land use development projects. Projects that fall below these thresholds are considered by BAAQMD to have less-than-significant construction-phase air pollutant emissions, provided the following additional conditions are met:

- All Basic Construction Mitigation Measures would be included in the project design and implemented during construction; and
- Construction-related activities would not include any of the following:
  - a. Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
  - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
  - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
  - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
  - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Project construction would not include any of these exclusionary activities. The BAAQMD construction screening threshold for single-family residential subdivisions is 114 dwelling units. With just six homes proposed by the project, the size of the development is far below the threshold at which BAAQMD recommends quantified modeling of air emissions. As previously noted, the screening criteria are quite conservative. Therefore, there is no potential for construction of the project to violate air quality standards. Nonetheless, in accordance with BAAQMD's *CEQA Air Quality Guidelines*, absent implementation of BAAQMD's Basic Construction Mitigation Measures, the project's effects of construction-generated criteria pollutants are presumed to have a **potentially significant impact** on air quality. Implementation of the controls listed in Mitigation Measure AQ-1, which incorporates the Basic Construction Mitigation Measures, would reduce the project's construction-related air quality impacts to a less-than-significant level.

**Mitigation Measure AQ-1:**

The property owner/applicant shall require the construction contractor to reduce the severity of project construction period dust and equipment exhaust impacts by complying with the following control measures:

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

**Operational Impacts**

As noted above, BAAQMD's operational thresholds of significance are the same as the construction thresholds. However, the screening criteria for project operations differ. The operational thresholds are 325 dwelling units for the single-family residential category. Again, the six dwelling units proposed by the project would be significantly below BAAQMD's operational screening thresholds for the applicable land use category, and there is no potential for the project to exceed BAAQMD operational thresholds of significance. The proposed project's operational emissions from the project would be less than significant and, therefore, the project's emissions would not be cumulatively considerable. Therefore, the project would have a ***less-than-significant cumulative impact*** on air quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Expose sensitive receptors to substantial pollutant concentrations?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: BAAQMD's *Air Quality Guidelines*<sup>7</sup> require an assessment of air toxics impacts on sensitive receptors.<sup>8</sup> The BAAQMD *Air Quality Guidelines* also requires an assessment of fine particulate matter or PM<sub>2.5</sub> concentrations as a result of the proposed project construction exhaust emissions. The proposed project would constitute a new emission source of air toxics or toxic air contaminants (TACs) such as diesel particulate matter (DPM) and PM<sub>2.5</sub> during project construction from operation of heavy-duty construction equipment.<sup>9</sup> Studies have demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. This section summarizes the health risk assessment (HRA) that was prepared by the RCH Group for the project based on the California Office of Environmental Health Hazard Assessment (OEHHA)'s *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.<sup>10</sup>

Health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to air toxic concentrations over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The maximally exposed individual (MEI) represents the worst-case risk estimate, based on a theoretical person continuously exposed for a lifetime at the point of highest compound concentration in the air. This is a highly conservative assumption, since most people do not remain at home all day and on average residents change residences every 11 to 12 years. In addition, this assumption assumes that residents are experiencing outdoor concentrations for the entire exposure period.

The HRA analyzes the incremental cancer risks to sensitive receptors in the vicinity of the proposed project, using emission rates (in pounds per hour) from CARB's CalEEMod emission model. DPM (reported as exhaust emissions of PM<sub>2.5</sub>) emission rates were input into the USEPA's AERMOD atmospheric dispersion model to calculate ambient air concentrations at receptors in the proposed project vicinity. This HRA is intended to provide a worst-case estimate of the increased exposure by employing a standard emission estimation program, an accepted pollutant dispersion model, approved toxicity factors, and conservative exposure parameters.

In accordance with OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, this HRA was accomplished by applying the highest estimated concentrations of TACs at the nearby residential receptors analyzed to the established cancer potency factors and

<sup>7</sup> Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017, [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).

<sup>8</sup> Toxic air contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., gasoline service stations, dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

<sup>9</sup> In 1998, CARB classified diesel particulate matter as a toxic air contaminant, citing its potential to cause cancer and other health problems. The USEPA concluded that long-term exposure to diesel engine exhaust is likely to pose a lung cancer hazard to humans and can also contribute to other acute and chronic health effects.

<sup>10</sup> Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, March 6, 2015. [http://oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://oehha.ca.gov/air/hot_spots/hotspots2015.html).

acceptable reference concentrations for non-cancer health effects. Increased cancer risks were calculated using the modeled DPM concentrations and OEHHA-recommended methodologies for both a young child exposure (3<sup>rd</sup> trimester of mother's pregnancy through 2 years of age) and adult exposure. The cancer risk calculations were based on applying the OEHHA-recommended age sensitivity factors and breathing rates, as well as fraction of time at home and an exposure duration of 30 years, to the DPM concentration exposures. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer-causing air pollutants.

These conservative methodologies overestimate both non-carcinogenic and carcinogenic health risk, possibly by an order of magnitude or more. Therefore, for carcinogenic risks, the actual probabilities of cancer formation in the populations of concern due to exposure to carcinogenic pollutants are likely to be lower than the risks derived using the HRA methodology. The extrapolation of toxicity data in animals to humans, the estimation of concentration prediction methods within dispersion models, and the variability in lifestyles, fitness and other confounding factors of the human population also contribute to the overestimation of health impacts. Therefore, the results of the HRA are highly overstated.

### ***Proposed Project Construction Health Impacts on Existing Sensitive Receptors***

The following describes the HRA results associated with existing receptors due to unmitigated proposed project construction activities. Since the HRA was completed, the project has been modified, with the previously planned public access street changed to a private street, resulting in slightly different grading requirements. The amount of net imported fill would be reduced by approximately 273 cubic yards. Consequently, there would be an incremental reduction in emissions generated during site grading and hauling of soil, and a concomitant reduction in the cancer and health risks reported below.<sup>11</sup>

The maximum cancer risk from unmitigated proposed project construction emissions for a residential adult receptor would be 5.3 per million and for a residential child receptor would be 82.1 per million, as shown in Table AQ-1.<sup>12</sup> The maximum concentrations would occur at a residential receptor to the south-southwest of the proposed project. Thus, the cancer risk to the child receptor due to construction activities would potentially be above the BAAQMD threshold of 10 per million and would be a ***potentially significant impact***. Implementation of Mitigation Measure AQ-2, below, would reduce the project's construction-related cancer risk impacts to a less-than-significant level.

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<sup>11</sup> Michael Ratte, Senior Air Quality Scientist, RCH Group, personal communication, August 12, 2020.

<sup>12</sup> This theoretical individual would be born on construction year 1 and subsequently be exposed to the full construction period. Individuals born after construction year 1 would be exposed to shorter construction duration and thus, result in a lower risk and health impacts.

**Table AQ-1**  
**Estimated Unmitigated Construction Health Impacts on Existing Sensitive Receptors**

Source	Cancer Risk (adult/child)	Hazard Impact (acute/chronic)	PM <sub>2.5</sub> Concentration
Unmitigated Project Construction	5.29/82.1	0.24/0.05	0.25
Significance Threshold	10	1.0	0.3
Significant (Yes or No)?	Yes	No	No

SOURCE: RCH Group, 2019

**Mitigation Measure AQ-2:**

*BAAQMD Basic and Enhanced Exhaust Emissions Reduction Measures.* The applicant shall implement the following measures during construction to further reduce construction-related exhaust emissions:

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
- All construction equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall be equipped with engines that meet or exceed CARB Tier 4 off-road emission standards.<sup>13</sup> Exemptions can be made for specialized equipment where Tier 4 engines are not commercially available within 200 miles of the project site. The construction contract must identify these pieces of equipment, document their unavailability, and ensure that the equipment operate on no less than CARB-approved Tier 3 engines with a CARB Level 3 Verified Diesel Emissions Control Device.<sup>14</sup>

As shown in Table AQ-2, with the implementation of Mitigation Measure AQ-2, the maximum cancer risk from mitigated proposed project construction for a residential-adult receptor would be 0.42 per

<sup>13</sup> Tier 4 emission standards were phased-in over the period of 2008 through 2015.

<sup>14</sup> Meets the intent to achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent CARB fleet average per Table 8-3 of the BAAQMD's *CEQA Air Quality Guidelines*.



million and for a residential-child receptor would be 6.5 per million. Thus, the total maximum cancer risk due to construction activities would be below the BAAQMD threshold of 10 per million and would be ***less than significant with mitigation***.

**Table AQ-2**  
**Estimated Mitigated Construction Health Impacts on Existing Sensitive Receptors**

Source	Cancer Risk (adult/child)	Hazard Impact (acute/chronic)	PM <sub>2.5</sub> Concentration
Mitigated Project Construction	0.42/6.47	0.02/<0.01	0.02
Significance Threshold	10	1.0	0.3
Significant (Yes or No)?	No	No	No

SOURCE: RCH Group, 2019

***Proposed Project Construction Non-Cancer Health Hazard Associated with Existing Sensitive Receptors***

Both acute (short-term, such as one-hour) and chronic (continuous or recurring, such as three months or more) adverse health impacts unrelated to cancer were also addressed and are measured against a hazard index (HI). The hazard index is defined as the ratio of the estimated air concentrations of DPM at the nearby sensitive receptors to a reference exposure level (REL) that could cause adverse health effects. The health impact is considered to be significant if the HI is greater than 1.0 (i.e., the estimated air concentrations of DPM is greater than the REL).

There is no acute REL for DPM. However, diesel exhaust contains acrolein, formaldehyde, and other compounds, which do have acute RELs. Since acrolein emissions represent over 90 percent of the acute health impacts from diesel engines, the HRA focused on the acute health impacts from exposure to acrolein emissions. The acute REL for acrolein established by the California Office of Environmental Health Hazard Assessment (OEHHA) is 2.5 µg/m<sup>3</sup>.<sup>15</sup> Thus, if the proposed project-related one-hour concentration of acrolein would exceed 2.5 µg/m<sup>3</sup>, resulting in an acute HI of greater than 1.0 (i.e., acrolein one-hour concentration/2.5 µg/m<sup>3</sup>), the acute health impacts would be significant. The chronic reference exposure level for DPM established by the California OEHHA is 5 µg/m<sup>3</sup>.<sup>16</sup> Thus, if the proposed project-related annual concentration of DPM would exceed 5.0 µg/m<sup>3</sup>, resulting in a chronic HI of greater than 1.0 (i.e., DPM annual concentration/5.0 µg/m<sup>3</sup>), the chronic health impacts would be significant.

The unmitigated acute HI would be 0.60, based on a project-related maximum 1-hour diesel concentration of 46.2 micrograms per cubic meter (µg/m<sup>3</sup>) (as determined by the dispersion modeling analysis) and acrolein speciation of 1.3 percent for DPM (i.e., 46.2 µg/m<sup>3</sup>/2.5 µg/m<sup>3</sup> times 1.3 percent = 0.60). The mitigated acute HI would be 0.02. The acute HI would be below the project-level threshold of 1 and the impact of the proposed project would therefore be less than significant.

<sup>15</sup> California Office of Environmental Health Hazards Assessment, Acute, 8-hour, and Chronic Reference Exposure Levels, June 2014, <http://www.oehha.ca.gov/air/allrels.html>.

<sup>16</sup> *Ibid.*

The chronic reference exposure level for DPM was established by the California OEHHA<sup>17</sup> as 5 µg/m<sup>3</sup>. Thus, the proposed project-related annual concentration of DPM cannot exceed 5.0 µg/m<sup>3</sup>; which would result in a chronic acute HI of greater than 1.0 (i.e., DPM annual concentration/5.0 µg/m<sup>3</sup>).

The unmitigated chronic HI would be 0.05, based on a proposed project-related maximum annual diesel concentration of 0.25 µg/m<sup>3</sup> (per dispersion modeling analysis) or 0.25 µg/m<sup>3</sup>/5.0 µg/m<sup>3</sup>, which is 0.05. The mitigated chronic HI would be less than 0.01. The chronic HI would be below the project-level threshold of 1 and the impact of the proposed project would therefore be less than significant.

Based on these results, the acute and chronic health impacts to sensitive receptors from construction of the project would be a ***less-than-significant impact***.

### ***Proposed Project Construction PM<sub>2.5</sub> Concentration Associated with Existing Sensitive Receptors***

The proposed project's unmitigated annual PM<sub>2.5</sub> concentration from construction activities would be 0.25 µg/m<sup>3</sup>. With implementation of **Mitigation Measure HRA-1**, the annual PM<sub>2.5</sub> concentration would be reduced to 0.02 µg/m<sup>3</sup>. Thus, the annual PM<sub>2.5</sub> concentration due to project construction would be below the BAAQMD threshold of 0.3 µg/m<sup>3</sup> and would be considered ***less than significant***.

### ***Proposed Project Operations Health Impacts***

The operations associated with the proposed project would involve minimal emissions from motor vehicles, and natural gas consumption for home heating. The daily weekday trip rate of 9.22 weekday trips per dwelling unit or an annual vehicle miles traveled of approximately 130,915 miles would result in less-than-significant emissions and very limited emissions related to diesel motor vehicles. Thus, the health impacts due to project operations would be expected to be ***less than significant***.

### ***Health Impacts on Proposed Sensitive Receptors***

The following describes the health risk assessment results associated with proposed residences as a result of existing cumulative sources such as permitted sources (i.e., diesel generators, boilers, gasoline stations), major roadways, and rail activities, etc.

The BAAQMD's *CEQA Air Quality Guidelines* include standards and methods for determining the significance of cumulative health risk impacts. The method for determining cumulative health risk requires the tallying of health risk from permitted stationary sources, rail activities, and roadways in the vicinity of a project (i.e., within a 1,000-foot radius or "zone of influence") to determine whether the cumulative health risk thresholds are exceeded.

BAAQMD has developed a geo-referenced database of permitted emissions sources throughout the San Francisco Bay Area, and has developed the *Stationary Source Risk & Hazard Analysis Tool*<sup>18</sup> for estimating cumulative health risks from permitted sources. No permitted sources are located within 1,000 feet of the project site.

BAAQMD has also developed a geo-referenced database of roadways throughout the San Francisco Bay Area and has developed the *Highway Screening Analysis Tool* for estimating cumulative health risks from major roadways. Mission Boulevard is located approximately 1,850 feet to the south-southwest of the project site and because it is more than 1,000 feet away, it was not included in the

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<sup>17</sup> California Office of Environmental Health Hazards Assessment - Acute, 8-hour, and Chronic Reference Exposure Levels, June 2014, <http://www.oehha.ca.gov/air/allrels.html>.

<sup>18</sup> Bay Area Air Quality Management District, *CEQA Tools and Methodologies*, <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>.

analysis. BAAQMD CEQA Air Quality Guidelines also require the inclusion of surface streets within 1,000 feet of the proposed project with annual average daily traffic of 10,000 or greater. BAAQMD has developed a county-specific tool, *Roadway Screening Analysis Calculator*, for estimating cumulative health risks from minor roadways. Upon review of nearby roadways, no roadway in the vicinity of the project meets the criteria. Therefore, there would be no adverse health impacts on future project residents from exposure to mobile or stationary sources or airborne pollutants.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Though offensive odors from stationary and mobile sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress, generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, odor emissions are highly dispersive, especially in areas with higher average wind speeds. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion.

The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a project. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. The operational odor threshold of significance adopted in the BAAQMD CEQA guidelines is five confirmed complaints per year averaged over three years; there is no threshold for construction activity.

With respect to the proposed project, following completion of project construction, residential development is not typically associated with unpleasant odor emissions, so it is assumed there would be no objectionable odors generated during project operations. In the highly unlikely event that the project created an ongoing odor impact, it would be addressed through complaints to BAAQMD. During the short-term construction of the project, diesel-fueled equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Due to the project site's hilly terrain that is exposed to prevailing westerly winds, upward dissipation of construction odors would be expected to occur more rapidly than at a flatland site surrounded by existing development.

Although found objectionable by many people, odors generated by construction equipment are intermittent and short-term sources of odors that are highly subject to the atmospheric dispersion and dissipation described above. The project would have **less-than-significant odor impacts** during construction. Following completion of project construction, there would be no objectionable odors generated during project operations.

Odor impacts can also occur from siting a new receptor (particularly a residential receptor) in proximity to an existing odor source, such as a sanitary landfill, wastewater treatment plant, asphalt batch plant, or petroleum refinery, among many other sources. The BAAQMD CEQA guidelines establish screening distances from a variety of odor sources that range from one to two miles. There are no odor-generating land uses listed in Table 3-3 of the BAAQMD CEQA guidelines within 2 miles of the project site, so future project residents would not be exposed to objectionable odors from existing facilities.

#### IV. BIOLOGICAL RESOURCES — Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation:** A biological resources assessment (BRA) of the project property was performed by a qualified biologist in August 2019 that is summarized in this section.<sup>19</sup>

##### **Special-Status Plants**

The project site supports two common habitat types: non-native annual grassland, which covers the majority of the site, and a small area of coyote brush scrub habitat. Dominant vegetation observed within the grassland habitat on the site included wild oat (*Avena fatua*), Italian thistle (*Carduus pycnocephalus*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow star thistle (*Carduus pycnocephalus*) and Italian rye grass (*Festuca perennis*). Just outside of the boundary of the project property there is a line of large trees including numerous pine trees (*Pinus* sp.), coast live oak (*Quercus agrifolia*), Peruvian pepper tree (*Schinus mole*), and various ornamentals.

The small area of coyote brush scrub occurs in the northern corner of the site, as shown on Figure BIO-1. This habitat consists of small coyote brush (*Baccharis pilularis*) shrubs. Many of the shrubs are dead, potentially from a fire, but the structure of the bushes still remain.

The BRA determined through a search of the California Natural Diversity Database (CNDDDB) that three special-status plant species have a moderate potential to occur on the property. The bent-flowered fiddleneck (*Amsinckia lunaris*), stinkbells (*Fritillaria agrestis*), and Diablo helianthella (*Helianthella castanea*) were identified as having a potential to occur on the site based on the presence of suitable habitat for the species. Each of these species is discussed below.

The bent-flowered fiddleneck is an annual of the family *Boraginaceae*. The inflorescence is spike-like and coiled at the tip with multiple small orange flowers. It is distributed throughout the inner north coast ranges of California, in the west Central Valley, and the San Francisco Bay Area. Habitat consists of coastal bluff scrub, cismontane woodlands, and valley and foothill grasslands. The blooming period is between March and June. Although a reconnaissance survey of the site was performed by a qualified biologist as part of the BRA, the survey was performed outside this blooming period, so its presence or absence could not be definitively determined.

Diablo helianthella is a perennial that exhibits yellow sunflowers that bloom between April and June. The plant grows up to 2 feet in height and has simple broad leaves that are attached at the base of the stem. The Diablo helianthella is known to grow on open grassy sites in cismontane woodland and

<sup>19</sup> Olberding Environmental, Inc., *Biological Resources Analysis Report for the Seven Hills Estates Property, Alameda County, California*, August 2019.



**Figure BIO-1**

**Biological Habitat Types on the Project Site**

Source: Olberding Environmental

closed-cone coniferous forests. The CNDDDB listed one occurrence (Occurrence # 88) of *Diablo helianthella* within 5 miles of the project site, within Garin Regional Park, about 4 miles northwest of the site. Although the project site does not have any type of woodland on site, it is just west of sloped wooded areas within the open space. Additionally, the grassland may provide suitable open areas for this species to occur. As with the bent-flowered fiddleneck, the BRA survey was performed outside the blooming period for this species, so its presence or absence is undetermined.

The third special-status plant species with potential to occur on the property is stinkbells, which are a bulb-forming herb of the *Liliaceae* lily family. Habitats of occurrence include chaparral, cismontane woodland, pinyon, and juniper woodland, and valley and foothill grasslands in clay and sometimes serpentine soils. This lily grows an erect stem reaching about half a meter in height with a clump of 5 to 12 long, narrow leaves clustered around its base. The nodding flower is a cup of six sepals, each 1 to 3 centimeters long and sometimes curved at the tips. They are white to yellow with greenish to pinkish markings on the outer surface and purple-brown on the inner surface. The nectaries inside the flower are long and prominent. Like the name suggests, the flower has an unpleasant odor. The blooming period is between March and June. Although the CNDDDB did not list stinkbells within a 5-mile radius of the project site, there were occurrences within the surrounding map quadrangles, and there is suitable habitat on the site.

Based on the results of the CNDDDB search and the identification of suitable habitat on the site for bent-flowered fiddleneck, stinkbells, and *Diablo helianthella*, one or more of these special-status plant species may occur on the project site. If they are present, they could be destroyed during site grading, which would constitute a **significant impact** pursuant to CEQA. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level:

**Mitigation Measure BIO-1:**

Prior to commencement of grading or other site disturbance, a qualified plant biologist shall conduct a rare plant survey during the overlapping blooming period (April through June) for the three special-status plant species identified as having potential to occur on the project site. The survey shall be performed in accordance with guidelines for rare plant surveys published by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 2, of the August 2019 biological resources assessment report prepared for the project by Olberding Environmental, Inc., shall be identified and mapped. If any special-status plant species are found on the site, the biologist shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW to identify appropriate mitigation to protect the species. Any further mitigation recommended by USFWS and/or CDFW shall be implemented prior to the initiation of site grading or other site disturbance. The results of the rare plant survey, as well as any additional mitigation requirements identified by USFWS and/or CDFW, as applicable, and the successful implementation of those requirements, shall be documented by the biologist in a letter report to be submitted to the Union City Planning Division. The City shall not issue a grading permit until these requirements have been satisfied.

**Special-Status Birds**

The annual grassland habitat on the site provides many foraging opportunities for a wide range of bird species. Passerine species observed during the BRA survey include dark-eyed junco (*Junco*



*hyemalis*), California towhee (*Melospiza crissalis*), black phoebe (*Sayornis nigricans*), and white-crowned sparrow (*Zonotrichia leucophrys*). Other avian species observed include American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), and wild turkey (*Meleagris gallopavo*). The limited scrub habitat, although small in geographic area, could provide numerous refuge or nesting opportunities for a variety of species. Various avian species such as western scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird, and black phoebe (*Sayornis nigricans*) were observed perched on the coyote brush bushes during the biological survey of the site.

Based on the results of the CNDDDB search and a review of federal and State databases of species listed as Threatened or Endangered (or listed as a "species of special concern" by the California Department of Fish and Wildlife (CDFW)), ten special-status bird species were identified to have a moderate to high potential to occur on the project site in a nesting or foraging capacity. The red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), loggerhead shrike (*Lanius ludovicianus*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), burrowing owl (*Athene cunicularia*) and Cooper's hawk (*Accipiter cooperii*) all have a high potential to occur in a nesting and foraging capacity. The golden eagle (*Aquila chrysaetos*), sharp-shinned hawk (*Accipiter striatus*) and northern harrier (*Circus hudsonius*) have a moderate potential to occur in a foraging capacity only. A brief description of each species is provided below, along with the listing status:

- **Red-Shouldered Hawk** (State Protected) is a medium-sized, slender raptor with long legs and a long tail with wide, dark bars and narrow white intervening stripes and white tips. The habitat that the red-shouldered hawk prefers varies from bottomland hardwoods and riparian areas to upland deciduous or mixed deciduous-conifer forest, and almost always includes some form of water, such as a swamp, marsh, river, or pond. In the west, the red-shouldered hawk sometimes occurs in coniferous forests, and has been expanding its range of occupied habitats to include various woodlands, including stands of eucalyptus trees amid urban sprawl. They typically place their nests in a broad-leaved tree (occasionally in a conifer), below the forest canopy but toward the tree top, usually in the crotch of the main trunk. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.
- **Red-Tailed Hawk** (State Protected) is a large hawk with distinctive red tail feathers in contrast to a brown-colored body, though not all red-tailed hawks exhibit the distinct coloration on their tail, and gradations may occur especially in young birds. Red-tailed hawks hunt rodents by soaring over grassland habitat. Nest trees for red-tailed hawks are usually tall trees with a well-developed canopy that includes a strong branching structure on which to build a nest. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.
- **White-Tailed Kite** (Federal Species of Concern, State Protected) is a falcon-shaped raptor with a long white tail and black patches on the shoulders that are highly visible while the bird is flying or perching. White-tailed kites forage in annual grasslands, farmlands, orchards, chaparral, and at the edges of marshes and meadows. They are found nesting in trees and shrubs such as willows (*Salix sp.*), California sycamore (*Platanus racemosa*), and coast live oak, often near marshes, lakes, rivers, or ponds. This raptor often hovers while inspecting the ground below for prey. The White-tailed Kite eats mainly small mammals, as well as some birds, lizards, and insects. Annual grasslands are considered good foraging habitat for white-tailed kites, which will forage in human-impacted areas. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.
- **Copper's Hawk** (State Protected) is a medium- to large-size raptor, with an average wingspan of 28 to 34 inches. They are distinctive for the black and white horizontal banding on the elongated tail and blue-gray head, back, and upper wings. Additional characteristics include

rusty red horizontal barring on a white breast, a large square head, and long yellow legs and feet. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.

- **Sharp-Shinned Hawk** (State Protected) is a small raptor with short, rounded wings, with an average wingspan of 17 to 23 inches. This hawk has a long tail that is squared-off at tip with prominent corners. This raptor typically flies with several quick, snappy wing beats and a short glide, but it also soars. Its small, rounded head does not project far beyond the wings when soaring. The adult sharp-shinned hawk exhibits a red eye, black cap, and a blue-gray back and upper wings. The white breast, belly and under wing coverts are marked by fine, thin, reddish bars. Sharp-shinned hawks specialize in hunting avian prey with songbirds making up 90 percent of its diet. However, these hawks will occasionally eat small rodents, such as mice and voles, and even some insects. Throughout their range, sharp-shinned hawks favor conifer trees (pine, spruce, or fir) as nesting sites, but may also use aspens and hardwood trees. The nest is always placed under dense forest cover, usually toward the top of a tall tree, but well under the canopy. Most nests are anchored between horizontal limbs and the tree trunk. There is no suitable nesting habitat for this species on or adjacent to the project site, but the annual grassland habitat on the site provides foraging opportunities for this species.
- **Burrowing Owl** (State and Federal Species of Special Concern) is a ground-dwelling member of the owl family. Burrowing owls are small brown- to tan-colored birds with bold spots and barring. Although they generally require open annual grassland habitats in which to nest, they can also be found on abandoned lots, roads, airports, and in other urban areas. Burrowing owls generally use abandoned California ground squirrel holes for their nesting burrow, but are also known to use pipes or other debris for nesting purposes. Burrowing owls prefer annual grassland habitats with low vegetative cover. The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old. The project area is historically known to provide suitable habitat for burrowing owls and the project site provides suitable grassland habitat for this species. A plethora of ground squirrels and their burrows were observed on site during the BRA site reconnaissance.
- **Loggerhead Shrike** (State and Federal Species of Special Concern) is a black and white perching bird with a black face mask that extends over the bill. A common resident and winter visitor in lowlands and foothills throughout California, it prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. It occurs only rarely in heavily urbanized areas, but is often found in open cropland. This species hunts large insects, small rodents and even small birds. Loggerhead shrikes are known for their habit of impaling their food on thorns or barb wire for future consumption. The range and habitat for the loggerhead shrike has steadily shrunk due to human development within grasslands; however, this species is often found on lands grazed by cattle that are fenced with barb wire. These birds use shrubs, dense trees, and thickets of vegetation for nesting sites. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.
- **American Kestrel** (State Protected) is the smallest of the raptor species and is distinct due to the black barring on its face. The female kestrel is slightly larger than the male bird and is differentiated by its brown and red coloration, while the male has gray wing patches near the top of the wing. Kestrels favor open areas with short ground vegetation and sparse trees. You'll find them in meadows, grasslands, deserts, parks, farm fields, cities, and suburbs. Kestrels utilize cavities in trees and structures for nesting and hunt small rodents and birds. The large



trees present just outside the project site boundary provide suitable nesting habitat, and the annual grassland habitat on the site provides foraging opportunities for this species. A kestrel was observed on the project site during the biological survey, perching on a dead tree in the center of the property and actively foraging on the site.

- **Northern Harrier** (State Species of Special Concern) is a slim, long-tailed raptor distinguished from other similar species by their prominent white rump patch. Males are pale gray in color, while females are brown with dark streaking on the breast. These birds are ground nesters and utilize habitats ranging from annual grassland to seasonal wetland for this purpose. They prefer dense ground vegetation or grasses in which to build nests, and may nest in willows, grasses, sedges, reeds, bulrushes, and cattails. This species breeds once per season, with primary females breeding from April to July, and secondary females breeding from May through September. An average of four eggs per clutch will take 28 to 36 days to hatch, with the young fledging 30 to 35 days after hatching. While there is no suitable nesting habitat on the project site, the northern harrier may forage on the site.
- **Golden Eagle** (State Protected, State Species of Special Concern) is typically found in open grasslands, pastures, and oak woodland, often near lakes and rivers. The plumage of this raptor is dark brown overall, with some white at the base of the tail, and golden-to-blond feathers on the nape of the neck. The bill and talons are black and the cere (soft membrane that covers the nostrils) and feet are yellow. Immature birds have a broad, white tail band with a black edge and large white patches on the undersides of the wings at the base of the primary feathers. Adult males weigh nine pounds with adult females weighing 12.5 pounds. Masters of soaring, golden eagle can reach speeds up to 200 mph with their 6.5- to 7.5-foot wingspans. Golden Eagles nest in high densities in open and semi-open habitat, but also may nest at lower densities in coniferous habitat when open space is available, (e. g. fire breaks, clear-cuts, burned areas, pasture-land, etc.). They can be found from the tundra, through grasslands, woodland-brushlands, and forested habitat, south to arid deserts, including Death Valley, California. Golden Eagles avoid nesting near urban habitat and do not generally nest in densely forested habitat. Individuals will occasionally nest near semi-urban areas where housing density is low and in farmland habitat. They nest on cliffs, in the upper one third of deciduous and coniferous trees, or on manmade structures such as windmills, electricity transmission towers, artificial nesting platforms, etc. They typically build nests that afford an unobstructed view of the surrounding habitat. Nests are constructed to create a strong, flat or bowl shaped platform, and existing nests may be reused with the addition of sticks and soft materials. Although the project site contains no suitable nesting sites, the open space to the east could provide appropriate habitat, allowing golden eagles to forage on the project property.

As part of the BRA conducted for the project site, a reconnaissance-level raptor survey was conducted at the property by a wildlife biologist. Observation points were established on the periphery of the site to view raptor activity over a 15- to 30-minute time period. The survey was conducted with the use of binoculars and notes were taken for each species occurrence. Additionally, utility poles and perch sites in the vicinity of the property were observed. All raptor activity within and adjacent to the site was recorded during the reconnaissance-level observation period. Two of the birds listed above (red-tailed hawk and American kestrel) were observed foraging on the property.

A reconnaissance-level burrowing owl survey was also conducted on the site to identify potential burrow sites or burrowing owl use of on-site habitat. The general presence and density of suitable burrow sites (e.g., rodent burrows) was evaluated. Extensive burrow colonies created by small mammals including but not limited to California ground squirrel (*Otospermophilus beechii*), Botta's pocket gopher (*Thomomys bottae*) and various vole species (*Microtus spp.*) were observed.

As previously noted, the ten special-status bird species described above all have the potential to utilize the project site for nesting and/or foraging, and red-tailed hawk and American kestrel were observed on the property during the single reconnaissance of the site. Some of the large trees growing just outside the site boundaries in Seven Hills Park that provide potential nesting habitat for some of these special-status bird species would be removed during development of the proposed project. These and other project construction activities have the potential to destroy the nests of birds nesting on or adjacent to the site and disturb birds utilizing the site for foraging opportunities, which would be a ***potentially significant impact***. Implementation of the following mitigation measures would reduce the impact to a less-than-significant level:

**Mitigation Measure BIO-2:**

If site grading or other project construction activities would take place during the bird nesting season (February through August), pre-construction surveys of the project site and the adjacent large trees shall be conducted by a qualified wildlife biologist to identify any nesting passerine birds or raptors (birds of prey). The surveys shall be conducted within 14 days prior to the commencement of the tree removal or site grading activities. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or adjacent trees, a protective buffer zone shall be established by the biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by the biologist, based on the sensitivity of the birds nesting and site conditions, such as whether the nest is in a line-of-sight of the construction activities. The nest site(s) shall be monitored by the biologist at least weekly during construction to see if the birds are stressed by the construction and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), project construction can proceed without further regard to the nest site(s).

***Other Special-Status Wildlife***

The cover from the grassland habitat and the extensive burrows offers suitable habitat on the project site for various reptile species. Numerous western fence lizards (*Sceloporus occidentalis*) were observed throughout the site during the biological survey. Other reptile species including Pacific gopher snake (*Pituophis catenifer catenifer*) and California king snake (*Lampropeltis californiae*) may also occur. Reptiles such as western fence lizards, alligator lizards (*Elgaria coerulea*), and various snake species including the Alameda whipsnake (*Masticophis lateralis euryxanthus*), could utilize the limited scrub habitat on the site for dispersal and foraging.

Although the CNDDB search identified California red-legged frog (*Rana draytonii*), Western Pond Turtle (*Emys marmorata*), and California Tiger Salamander (*Ambystoma californiense*) as occurring within a 5-mile radius around the project site, the biological assessment concluded that there is no suitable breeding or foraging habitat for these special-status species, and they are not expected to be present.

The Alameda whipsnake, which is listed as a Threatened species by both USFWS and CDFW, is one of two subspecies of the California whipsnake. It is distinguished from the chaparral whipsnake (*M. l. lateralis*) by the broad orange striping on its sides. Adults reach approximately three to five feet in length and show a sooty black to dark brown back, cream colored undersides and pinkish tail. This species is typically found in chaparral, northern coastal sage scrub, and coastal sage habitats;

however, annual grasslands, oak woodlands, and oak savannah serve as habitat during the breeding season. Egg-laying occurs near scrub habitat on ungrazed grasslands with scattered shrub cover. The known distribution for Alameda whipsnake includes Sobrante Ridge, Oakland Hills, Mount Diablo, the Black Hills, and Wauhab Ridge.

CNDDDB listed 24 occurrences of the Alameda whipsnake within the vicinity of the project site, though the exact locations of these sightings were not recorded in the CNDDDB due to the sensitivity of this species. The project site is just west of the USFWS-designated critical habitat for this species. Also there are rock outcrop habitats on the site, which the Alameda whipsnake characteristically prefers, but adjacent development reduces the potential for the snake to utilize the site. Furthermore, although the site has grassland habitat, it is not suitable for the Alameda whipsnake due to its low vegetation height. Based on these factors, the biological assessment concluded that there was a moderate potential for the Alameda whipsnake to utilize the project site for dispersal and/or foraging only.

Site clearing and grading activities during project construction have the potential to harm or kill Alameda whipsnakes that could be present, which would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level:

**Mitigation Measure BIO-3:** A pre-construction survey of the project site for the potential presence of Alameda whipsnake shall be conducted by a qualified wildlife biologist no more than 48 hours prior to commencement of ground disturbance or vegetation removal. If any whipsnakes are identified, the biologist shall develop appropriate mitigation to protect the species and compensate for lost Alameda whipsnake habitat. The mitigation shall be determined in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) and implemented to the satisfaction of those agencies. Incidental take permits shall be obtained from these agencies prior to the City issuing a grading permit.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no riparian habitat or other sensitive natural community on the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no wetlands on the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The project site is bordered on the northwest by residential development and on the southwest by a neighborhood park, and is at the eastern edge of extensive urban development. Given these factors, the site is not expected to be utilized to any significant degree as a migratory corridor for wildlife, and no wildlife nursery sites were identified during the biological survey of the site. There is no fish habitat on the site, so there is no potential for the project to interfere with migratory fish. While the site may be utilized for foraging by birds and other wildlife species, there is no evidence the site functions as a significant migration corridor. This would be a **less-than-significant impact**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Union City's Tree Preservation Ordinance is codified in Chapter 12.16 of the Municipal Code. The ordinance states that the "preservation of trees is necessary for the health and welfare of the citizens of the City in order to preserve the scenic beauty, prevent erosion of topsoil, protect against flood hazards and risk of landslides, counteract the pollutants in the air, maintain the climatic balance and decrease wind velocities, contributing greatly to the value of land in the City."

The ordinance regulates removal or trimming of trees both within public places (streets, parks, etc.) and on private property. Section 12.16.170 requires a permit for removal or trimming of any trees meeting criteria that vary according to the context of the proposed removal. In the case of the proposed



project, which occurs on an undeveloped property, a permit is required for removal of any tree with a trunk circumference of 12 inches or greater, as measured 3 feet above the ground. In evaluating a request for a tree removal permit, the Public Works Director may consider the health and condition of the tree(s) proposed for removal in determining any tree replacement requirements to be imposed as a condition of approval for the permit.

To determine whether the existing trees on the project site would be subject to the City's Tree Preservation Ordinance, an evaluation of the trees was performed by a professional arborist in March 2019.<sup>20</sup> The arborist evaluated five trees growing along the northwest edge of the site as well as 39 trees on adjacent City property growing in Seven Hills Park. The arborist determined that all 44 trees evaluated were considered protected pursuant to the Tree Preservation Ordinance. Because some of the trees on City property were located well away from any expected disturbance that would be caused during construction of the project, this discussion focuses on the trees that could be adversely affected by development of the project or that could pose a threat to the project. The large coyote brush shrubs located in the northern corner of the site would not be affected by the proposed development and were not evaluated in the arborist report.

There are ten different tree species on or adjacent to the project site, including:

- 2 Arizona cypress (*Cupressus arizonica*)
- 1 Monterey cypress (*Hesperocyparis macrocarpa*)
- 1 Canary Island pine (*Pinus canariensis*)
- 23 Aleppo pine (*Pinus halepensis*)
- 1 Western sycamore (*Platanus racemosa*)
- 1 London plane (*Platanus x hispanica*)
- 3 Almond (*Prunus dulcis*)
- 1 Coast live oak (*Quercus agrifolia*)
- 3 California pepper (*Schinus mole*)
- 8 Coast redwood (*Sequoia sempervirens*)

The arborist determined that all 44 trees have a trunk circumference of 12 inches or greater (equivalent to a diameter of 3.82 inches) and are subject to the City's Tree Preservation Ordinance. However, 14 of the trees are in poor condition.

All of the trees growing on City property adjacent to or in close proximity to the southern edge of the site are Aleppo pines, with trunks ranging in size from 10 inches to 24 inches in diameter. Of these 23 trees, seven are rated in poor condition, 15 are in fair condition, and one is dead. Only three of these trees is rated as having moderate suitability for preservation, while the other living trees are given a low suitability for preservation. Nonetheless, due to the fact that the trees are on City-owned property, the arborist report provides recommendations for protecting the trees during project construction that are not proposed for removal. No trees would be removed to accommodate the temporary and short-term construction access driveway from Seven Hills Park.

All five trees growing on the project site and nine of the Aleppo pine trees growing on Seven Hills Park property are proposed for removal to accommodate the proposed project. Two of the trees proposed for removal would be unlikely to survive the root loss that would be required for construction of a retaining wall. Fenced tree protection zones with a radius ranging from 15 to 20 feet should be

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<sup>20</sup> HortScience/Bartlett Consulting, *Arborist Report: Seven Hill Estates, Union City, CA*, March 28, 2019.

established around the 10 trees proposed for retention. No grading or other construction activity should be performed within the tree protection zones, and no underground utilities should be installed within the protection zones. A variety of additional recommendations to protect the trees are presented in the arborist report.

The project would be required to obtain a tree removal permit prior to the commencement of site preparation and project construction, and would be required to comply with conditions established with the permit, including the planting of replacement trees. Therefore, the project would not conflict with the City's Tree Preservation Ordinance. There are no other local policies or ordinances protecting biological resources that would apply to the project or with which the project could conflict. The project would have **no impact** on policies related to protection of biological resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no adopted Habitat Conservation Plan or other conservation plan applicable to the project site.

## **V. CULTURAL RESOURCES** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: In order to be considered a significant historical resource as defined in Section 15064.5 of the *CEQA Guidelines*, a building must be at least 50 years old. In addition, Section 15064.5 defines an historical resource as, "... a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources," properties included in a local register of historical resources, or properties deemed significant pursuant to criteria set forth in *Public Resources Code* Section 5024.1(g). According to *CEQA Guidelines* Section 15064.5(a)(3), a lead agency can determine that a resource is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the determination is supported by substantial evidence in light of the whole record.

In order to be eligible for listing in the California Register of Historical Resources (CRHR), a property must meet at least one of the following criteria:

- Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2: Is associated with the lives of persons important in our past;
- Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.<sup>21</sup>

In addition, to be eligible for the California Register, the resource must retain enough of its historic integrity to be recognizable as an historical resource, and typically must be at least 50 years old. Following the National Register of Historic Places integrity criteria, California Register regulations specify that integrity is a quality that applies to historic resources in seven ways: location, design, setting, materials, workmanship, feeling, and association.<sup>22</sup>

There are currently no buildings or man-made improvements on the project site, and no remnants of building foundations or other signs of previous development. Based on a review of topographic maps dating to 1906 and aerial photographs dating to 1946, there is no evidence that there has ever been any human development on the project site. The archival research of historical and archaeological records discussed in the next subsection did not identify any evidence of historic-period activity at the project site, nor did a systematic reconnaissance of the site by archaeologists. Researchers associated with the California Historical Resources Information System concluded that there is low probability that buildings or structures that are 45 years of age or older are present at the project site. However, in the unlikely event that historic resources are present within the subsurface of the site, implementation of Mitigation Measures CUL-1 and CUL-2, set forth in the next subsection, would ensure that impacts to historic resources would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: The San Francisco Bay area was occupied by Native Americans as far back as 3,000 to 4,000 years ago. Recorded archaeological sites in Alameda and the surrounding region indicate that at the time of initial Euroamerican incursion into the project area (circa 1770), the region was occupied by Native Americans who spoke Chochenyo. These people were a subset of the Penutian-speaking Ohlone (referred to as "Costanoans" by the Spanish) residing in northern California at the time the Spanish arrived in the region. The Ohlone territory encompassed much of the San Francisco Bay area and extended eastward to the Central Valley and southward through Monterey Bay. Previously undiscovered Native American resources are often encountered on the Bay margins and in proximity to historic water sources, among other places.

<sup>21</sup> California Resources Agency, *CEQA Guidelines*, Section 15064.5(a)(3), as amended September 27, 2016.

<sup>22</sup> The definition of integrity under the California Register follows National Register of Historic Places criteria. Detailed definitions of the qualities of historic integrity are in National Register Bulletin 15, *How to Apply National Register Criteria for Evaluation*, published by the National Park Service.

According to ethnographic research, the tribal group who lived in the vicinity of the project site at the time of contact with European settlers were the Tuibun Ohlone who would have spoken Chochenyo (Milliken 1995:229,258).<sup>23</sup> This group controlled the Fremont Plain to San Francisco Bay, including lower Alameda Creek and the Coyote Hills. Their neighbors just to the south were the Alson Ohlone, who also spoke the Chochenyo dialect.

An archival search was conducted by the Northwest Information Center (NWIC) at Sonoma State University, which is part of the California Historical Resources Information System (CHRIS), to evaluate the potential for significant archaeological resources to be present on the project site.<sup>24</sup> Due to the project site's location on a partially wooded hillslope and in proximity to Dry Creek, Alameda Creek, Quarry Lakes, and two nearby intermittent drainages—conditions favored for prehistoric Native American habitation—the NWIC concluded that there is a moderate potential for unrecorded Native American cultural resources to be present within the project site. To further explore this possibility, the NWIC recommended that a qualified archaeologist conduct further archival and field study to identify archaeological resources that may be present on or beneath the surface of the site. Although a portion of the site (approximately 15 percent) was surveyed in 1998 prior to development with the existing adjacent residential subdivision, the NWIC noted that changes in archaeological theory and methods warranted a new investigation encompassing the entirety of the site. The NWIC also recommended that Union City reach out to Native American tribes affiliated with the project area to determine whether they had any knowledge of Native American resources in the project area.

In accordance with these recommendations, the archaeological consulting firm of Archeo-Tec was retained to conduct additional research.<sup>25</sup> The work by Archeo-Tec also included coordination with affiliated Native American tribes identified by the Native American Heritage Commission (NAHC), the results of which are discussed in Section XVII of this Initial Study. Archeo-Tec archaeologists Juliana Quist and Patricia Paramoure conducted a pedestrian survey of the project site on October 4, 2019 and subsequently conducted subsurface testing of the site.

Archeo-Tec also performed a supplemental record search of the archival records at the NWIC, examining previous archaeological studies conducted within a half-mile radius around the project site. Thirteen previous studies have been conducted within this radius, and two archaeological sites have been recorded within the study area. One of the sites consisted of a collection of hammerstones, cores, choppers, flake tools, manos, metates, and pestles that were strewn about the surface and within the plow zone of an agricultural field lying just north of Mission Blvd, on the Masonic Home property. The site would have lain along the banks of Acacia Creek prior to modern alterations to that waterway.

The other recorded site consisted of several isolates recovered from the upper terrace area to the northeast of the agricultural field related to the first site mentioned above. Despite the favorable location for habitation at this location adjacent to Acacia Creek, subsurface testing revealed no buried archaeological deposits. Due their proximity and association with the same minor drainage along their southern boundaries, the archaeologists concluded that these two sites are likely parts of the same prehistoric use pattern and occupation, i.e., represent a single archaeological site.

The reconnaissance survey of the project site by Archeo-Tec archaeologists revealed no prehistoric artifacts, shell, darkened soil, calcined bone, or other indicators of occupation. Evidence of historic

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<sup>23</sup> Randall Milliken, *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*, pages 229 and 258, 1995.

<sup>24</sup> Northwest Information Center, Sonoma State University, *Record Search Results for the Proposed Florence Street Residential Subdivision Project, Union City*, NWIC File No. 18-2297, June 25, 2019.

<sup>25</sup> Archeo-Tec, *Phase I Cultural Resources Assessment Report for the Florence Street Residential Subdivision Expansion Project, Union City, Alameda County, California*, November 2019.



impacts was limited to some orchard remnants, as well as some fence posts and two-track roadbeds likely used for farm access. A light scattering of modern trash consisting of bottle glass and plastics was visible along much of the lower portions of the project site where it abuts Seven Hills Park.

Two days of subsurface testing of the site were conducted by Archeo-Tec archaeologists on October 22 and 29, 2019. On the first day of testing, shovel test pits (STPs) were hand-excavated in the locations of the proposed house pads. The STPs were dug to a depth of about 50 centimeters (cm) in most instances, with a diameter of 50 cm. The location of each STP was recorded with a handheld Global Positioning System (GPS) device. The locations of the STPs is shown on Figure CUL-1.

All excavated material was screened through a ¼-inch mesh and physically inspected. In general, the soils were dark greyish brown silty clay or clay silt loams to a depth of about 15 cm. This stratigraphic surface layer clearly represented the historic plow zone. Below the surface was a dense, dark grey silty clay, which was often accompanied by angular sedimentary gravel and cobbles. Despite the physical challenge of digging in dense soil, every effort was made to excavate the test pits to a full depth of 50 cm below surface. One exception was STP #4, located in proposed house pad #4. The steep slope in this area had led to erosion that prevented topsoil accumulation below a depth of only 5 cm, and the eroding, angular sandstone bedrock below was not passable.

The results of the first day of testing helped inform placement of the subsequent testing locations. Based on the experience with steep slope and exposed bedrock in STP #4, the decision was made not to test proposed house pad #5. Instead, STP #5 was placed in the cul-de-sac area of the proposed Florence Street Extension, STP #6 was located in the location of house pad #6, and STP #7 was placed on the flattest portion of the project site, where the driveway of Lot #2 is proposed. This layout was intended to test the most sensitive areas of proposed construction (based on likelihood due to surface topography and soil erosion). In total, seven test locations were excavated.

Soils in STPs #5-7 were consistent with the those in STPs 1-3, and no artifacts, cultural soils, marine shell, calcined bone, or any other indicators of prehistoric cultural occupation were identified during subsurface testing. Additionally, no historic or even modern trash were identified in the shovel tests.

Based on these findings, no further archaeological investigations of the project site were recommended by Archeo-Tec. However, while unlikely, there is still some possibility for that unexpected archaeological resources to be present within the subsurface of the site. Were such resources to be present, excavation or other surface/subsurface disturbance undertaken during the development of the project damage or destroy the resources, which could result in a **significant, adverse impact** on archaeological resources. Implementation of the following standard CEQA mitigation measures, required by Section 15064.5 of the *CEQA Guidelines*, would reduce the potential impact to a less-than-significant level:

**Mitigation Measure CUL-1:** City Staff shall advise the Project Construction Superintendent, Project Inspector, and Building Inspector at a pre-construction conference of the potential for encountering cultural resources during construction and the applicant's responsibilities per CEQA should resources be encountered. This advisory shall also be printed on the Plans and Specification Drawings for this project.

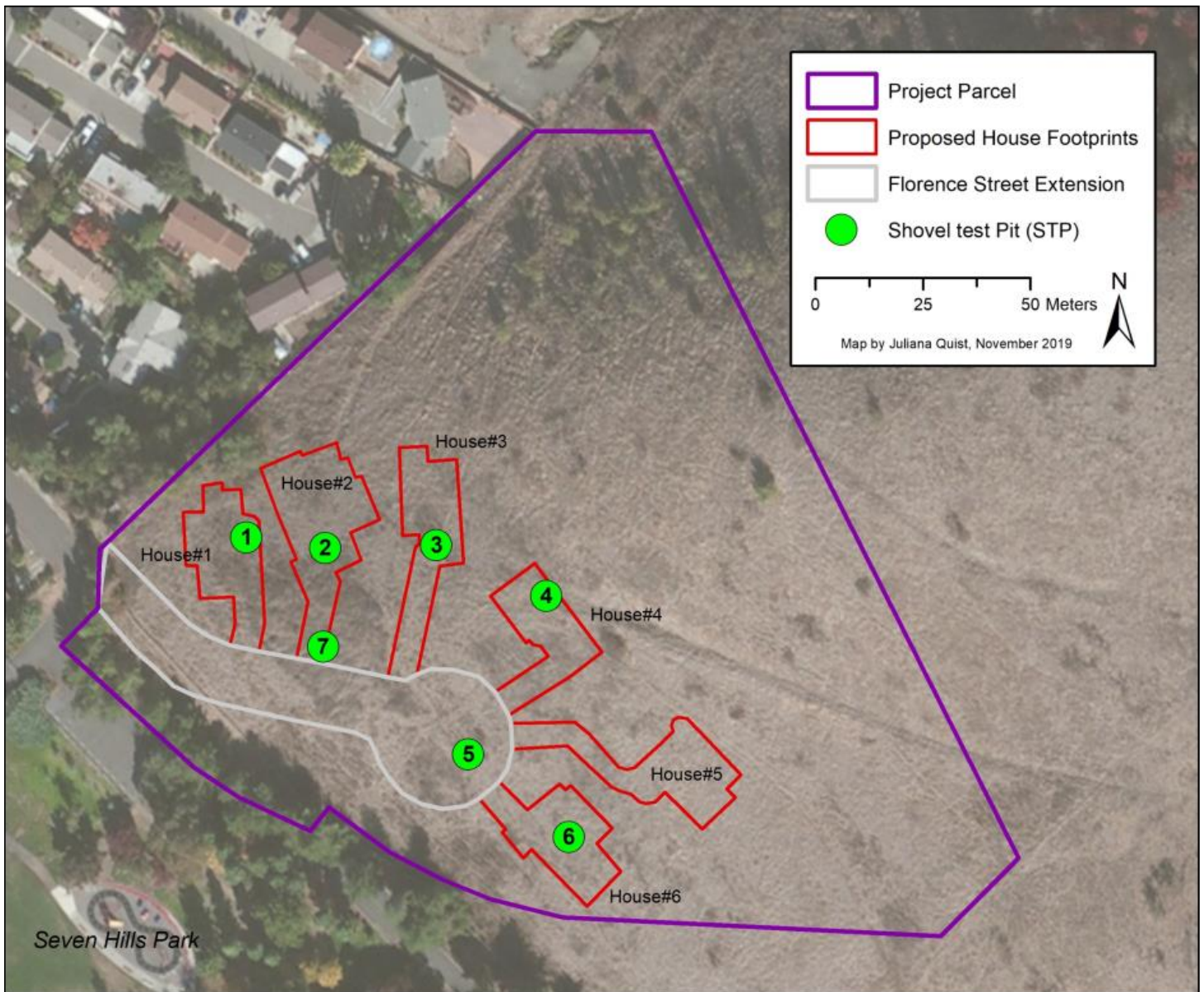
**Mitigation Measure CUL-2:** Throughout site grading and all other ground-disturbing project construction activities, a qualified archaeological monitor shall be present to observe the construction activities in order to identify any historic or prehistoric cultural resources that could be encountered during the ground-disturbing activities. In the event that any cultural resources are discovered, all ground disturbance within 100 feet of

the find shall be halted until the archaeologist can evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). (Construction personnel shall not collect any cultural resources.) Any further mitigation measures recommended by the archaeologist shall be implemented and construction shall not resume in the vicinity of the find until the archaeologist has authorized the resumption of work. The results of any additional archaeological effort required through the implementation of this measure and/or Mitigation Measure CUL-3 shall be presented in a professional-quality report, to be submitted to the Union City Planning Division and the Northwest Information Center at Sonoma State University in Rohnert Park.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Disturb any human remains, including those interred outside of formal cemeteries?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Similar to the potential to encounter cultural artifacts described in the preceding subsection, there is a possibility that human remains associated with the possible prehistoric occupation of the site by Native Americans. Such remains are considered sacred by Native Americans tribal groups, and their disturbance or destruction during site grading or other project construction activities would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce the potential impact to less than significant with mitigation.

**Mitigation Measure CUL-3:** In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the City, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.



**Figure CUL-1**

Archaeological Subsurface Testing Locations  
in Relation to Proposed Project Features

**VI. ENERGY** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Construction of the proposed project would require consumption of gasoline and diesel fuel by construction workers travelling to and from the site, by trucks delivering construction materials and supplies to the site, and by earthmoving, paving, and other construction equipment. Once the project is completed and occupied, gasoline and diesel fuel would continue to be consumed by residents, visitors, delivery and repair vehicles, and service providers traveling to and from the site. Electricity and natural gas would be consumed for space and water heating and landscape maintenance (i.e., electricity to control irrigation equipment, if installed), as well as the operation of household appliances and amenities that the future homeowners might use, such as hot tubs or electric vehicle charging.

During construction of the project, the building contractor would be required by Mitigation Measure AQ-1 (see Section III-b) to limit idling time of equipment and vehicles to 5 minutes or less and maintain construction equipment and vehicles in optimal working condition. These requirements would benefit air quality and would also prevent wasteful or inefficient consumption of fuel during project construction. The applicant will also be required to comply with the City's Construction and Demolition (C&D) Debris Recycling Ordinance codified in Chapter 15.75 of the Municipal Code, which mandates recycling of 100 percent of the Portland cement, asphalt concrete, land-clearing and soils, and plant debris from all covered construction projects, which would include the proposed project. The ordinance requires diversion of at least 50 percent of all remaining C&D debris from landfill disposal. To ensure compliance, the applicant will be required to post a performance security fee of \$10,000 or 3 percent of the total project cost, whichever is less. Compliance with the ordinance would help reduce consumption of energy associated with transport, processing, and disposal of solid waste at landfills.

Once the project is completed and occupied, the City won't have direct control over how residents consume energy, but inefficient use of energy would be minimized through compliance with applicable provisions of the California Green Building Standards Code, codified in Title 24 of the California Code of Regulations (CCR), and with general building energy efficiency standards, also part of Title 24, which require energy-efficient ceiling and rafter roof insulation, walls, floors, windows, doors, luminaires, heating and cooling systems, appliances, water heaters, and pool and spa systems.

Part 6 of Title 24 also sets energy and/or water efficiency standards for home appliances, including refrigerators, freezers, dishwashers, clothes washers and dryers, stoves, room and central air conditioners, space heaters, water heaters, pool heaters, plumbing fixtures, incandescent and fluorescent lamps, emergency lighting, luminaires, computers, televisions, audio and video equipment, battery charger systems, and more. There are also federal regulations pertaining to appliance efficiency, and in many cases, the California standards are the same as the federal standards. It should be noted that water efficiency contributes to energy efficiency by reducing energy requirements for treating and pumping domestic water.



Compliance with these required regulations would ensure that construction and operation of the proposed homes would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The project would have a ***less-than-significant impact*** on energy resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Statewide, the *Integrated Energy Policy Report* prepared by the California Energy Commission provides a blueprint for continuing to grow the California economy while reducing the environmental footprint of its energy system.<sup>26</sup> The State's energy system includes energy extraction, transport, conversion (such as combusting natural gas in power plants to generate electricity or producing gasoline and diesel from crude oil in refineries), and consumption for services (such as electricity for lighting, natural gas use in homes and buildings for space and water heating, pumping water to communities and crops, and gasoline and diesel to fuel cars and trucks), as well as electricity from out-of-State plants serving California.

California's electricity generation capacity is composed of multiple fuel sources, including coal, hydroelectric, natural gas, nuclear, oil, petroleum coke, waste heat, biomass, geothermal, solar photovoltaic, solar thermal, and wind. In 2018, the State had an installed generation capacity from these multiple sources of 194,727 gigawatt hours (GWh).<sup>27</sup> The composition of California's in-State generation capacity has shifted since the 2002 passage of Senate Bill 1078, which required that 20 percent of electric production come from renewable resources by 2017. With the passage of SB X1-2 in 2011, this was increased to 33 percent renewables by 2020; it was raised again to 50 percent renewables by December 31, 2030 by SB 350, passed in 2015.

Because energy consumption is directly tied to the emissions of GHGs, and in fact, is the source of 80 percent of GHG emissions in the State,<sup>28</sup> Union City's Climate Action Plan (CAP), intended to reduce emissions of GHGs, can be viewed as a local plan for energy efficiency, and in fact it contains GHG reduction measures specifically pertaining to building and energy efficiency as well as measures to conserve water. (As noted above, water conservation has a beneficial effect on energy consumption.) As discussed in more detail in Section VIII-b, below, the project would not conflict with the City's CAP, and therefore would not conflict with a local plan for energy efficiency.

Because the CEC's *Integrated Energy Policy Report* is intended to reduce GHG emissions by transitioning the State's energy portfolio to more renewable energy sources, it can also be viewed as a plan for renewable energy and energy efficiency on the Statewide level. As discussed in Section VI-a, above, the proposed project would be required to comply with a variety of building and appliance energy efficiency standards, which would maximize its energy efficiency. Therefore, the project would not conflict with a State plan for energy efficiency.

<sup>26</sup> California Energy Commission, *2016 Integrated Energy Policy Report Update*, February 28, 2017.

<sup>27</sup> California Energy Commission, *California Energy Almanac*, Electric Generation Capacity & Energy, In-State Electric Generation by Fuel Type, Accessed May 30, 2019 at: [http://www.energy.ca.gov/almanac/electricity\\_data/electric\\_generation\\_capacity.html](http://www.energy.ca.gov/almanac/electricity_data/electric_generation_capacity.html).

<sup>28</sup> California Energy Commission, *2016 IEPR Update: Integrated Energy Policy Report*, Publication No. CEC-100-2016-003-CMF, Chapter 1: Environmental Performance of the Electricity Generation System, 2016.

## VII. GEOLOGY AND SOILS — Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</i>				
i) <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.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** Although the Hayward fault is located less than ¼-mile southwest of the project site, the site lies outside the Alquist-Priolo fault zone that flanks the fault.<sup>29</sup> No seismically active fault crosses the project site or in proximity to the site. The geotechnical investigation report prepared for the project concluded that there is low risk for ground rupture at the site from a major seismic event.<sup>30</sup>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) <i>Strong seismic ground shaking?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Similar to most locations throughout the San Francisco Bay Area, the project site is potentially subject to strong seismic ground shaking during an earthquake on one of the major active earthquake faults that transect the region. The geotechnical investigation report prepared for the project states that a large earthquake centered on a nearby segment of the Hayward-Rodgers Creek Fault (approximately 1,100 feet to the southwest), Calaveras Fault (approximately 5 miles to the northeast), or San Andrea Fault (approximately 17 miles to the southwest) is expected to cause severe ground shaking in the project vicinity.<sup>31</sup> The report notes that the Bay Area segments of each of these active faults have potential for producing one or more magnitude 6.7 or greater earthquakes by the year 2043, with highest probability for occurrence of such an event on the Hayward-Rodgers Creek Fault.

Given the high magnitude of seismic ground shaking and related peak ground acceleration that could be experienced at the site, there is potential for a strong seismic event to result in severe damage or

<sup>29</sup> California Geological Survey, Earthquake Zones of Required Investigation: Niles Quadrangle [map], January 1, 1980.

<sup>30</sup> Geosphere Consultants, Inc., *Geotechnical Study: Vesting Tentative Map 8349, Proposed Seven Hill Estates, TBD Florence Street, APN 87-0034-002-7, Union City, California*, August 15, 2018.

<sup>31</sup> *Ibid.*

even structural failure of the proposed homes and roadway piers, with potential to severely injure or kill building occupants. However, in accordance with recent CEQA case law (e.g., *California Building Industry Association v. Bay Area Air Quality Management District* (Aug.12, 2016) 2 Cal.App.5<sup>th</sup> 1057), CEQA generally no longer considers an impact of the environment on a project to be a significant impact. Accordingly, this would be a **less-than-significant impact**. However, pursuant to Section 15.85.100 of the Union City Municipal Code and General Plan Policy S-3.1, the project applicant has been required to submit a site-specific geotechnical report prepared by a geotechnical engineer that includes recommendations for site preparation and foundation design. The report prepared by Geosphere Consultants, Inc. referenced above was submitted to the City in compliance with this requirement.

The geotechnical report includes recommendations for site preparation and grading, placement and compaction of engineered fill, construction of utility trenches, foundation design, parameters for slabs-on-grade and concrete flatwork, retaining walls, pavements, drainage, and more. It is recommended that the homes be supported on drilled pier foundations on reinforced cast-in-place concrete piers extending to a minimum depth of 12 to 37 feet below the existing ground surface. On fill slopes great than 10 degrees, fill should be placed as a buttress fill graded with an equipment-width (i.e., minimum 8 feet wide) toe key inclined at least 2 percent into the slope, with a minimum embedment of 5 feet into bedrock or competent native soil, as determined by the Field Engineer during construction.

Fill slopes are recommended to be no greater than 2:1 (horizontal:vertical), but a gradient of up to 1½:1 could be considered provided it is reinforced by an approved geogrid (i.e., Miragrid or equal), spaced horizontally 2 feet apart in the compacted fill. Where house pads, driveways, and the access street are not included in the mass grading, the soils should be overexcavated to a depth of at least 18 inches and replaced with compacted non-expansive soil, moisture-conditioned as necessary, and placed in lifts with a maximum thickness of 8 inches.

A reinforced concrete V-ditch should be constructed at the top of the finished fill slope to intercept and redirect surface runoff to an approved discharge location. Additional V-ditches should be installed at intervals of approximately 20 feet in the vertical fill slopes. Where the upslope side of a proposed building foundation is not designed as a fully drained retaining wall, the geotechnical engineer recommends that a perimeter foundation drain be installed to intercept potential near-surface seasonal seepage during rainfall. The foundation drain should extend to a depth of at least 12 inches below the crawl space elevation, and at least 8 inches below a pavement or slab section. The foundation drainage trench should be at least 12 inches wide and 12 inches deep, lined with ¾-inch clean crushed rock underlain by a 4-inch diameter perforated, SDR 35 PVC drainpipe or better, and covered with a Mirafi 140N or better filter fabric. The perforated pipe should be connected to a solid SDR 35 drainpipe or better to carry water to an approved discharge location.

The Union City Building Division and the Public Works Department will ensure that the project design incorporates the recommendations in the geotechnical report. In addition, the Building Division will ensure that the project complies with the current California Building Standards Code, which includes detailed structural design requirements intended to provide adequate structural integrity to withstand the maximum credible earthquake and the associated ground motion acceleration. Compliance with the applicable building codes will maximize the structural stability of the proposed building and minimize the potential for damage and injury during a strong seismic event.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Liquefaction occurs when clean, loose, saturated, uniformly graded, fine-grained soils are exposed to strong seismic ground shaking. The soils temporarily lose strength and cohesion, resulting in a loss of ground stability that can cause building foundations to fail. The geotechnical investigation report prepared for the project states that there is virtually no potential for liquefaction at the site because it is underlain by semi-consolidated colluvial deposits and consolidated bedrock at relatively shallow depth. It is also not within liquefaction zones mapped by the California Geological Survey.<sup>32</sup>

Lateral spreading, another form of seismic ground failure, is generally associated with liquefaction; since there is virtually no potential for liquefaction at the site, it is assumed the potential for lateral spreading is very low to none. As noted in Section VII-a-ii, the geotechnical investigation report prepared for the project includes site and building foundation design recommendations that will ensure the structural stability of the proposed homes and pavements. There would be **no impact** from liquefaction or lateral spreading.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Although there are steep slopes on and adjacent to the project site, regional landslide inventory mapping indicates the site is underlain by Claremont shale bedrock and a derivative clay soil mantle that is not particularly susceptible to landsliding.<sup>33</sup> The California Geological Survey reports that landsliding in this formation is generally controlled by adverse geologic structure (i.e., bedding and joint discontinuities).<sup>34</sup> The geotechnical investigation report prepared for the project noted that there was no reported occurrence of landsliding from severe ground shaking in the Claremont shale around the site following the 1906 San Francisco and 1868 Hayward earthquakes, and there is a general absence of geomorphic evidence the site has been subjected to landsliding in at least the past 100 years.<sup>35</sup>

Despite these indications that the site is not subject to landslides, the geotechnical consultant performed a landslide screening analysis because the northeastern half of the site is located within the State of California Seismic Hazard Zone overlay recommending evaluation of potential

<sup>32</sup> California Geological Survey, *op. cit.*

<sup>33</sup> Geosphere Consultants, Inc., *op. cit.*

<sup>34</sup> California Geological Survey, Earthquake-Induced Landslide Zones of Required Investigation in the Niles 7.5-Minute Quadrangle, Alameda County, California, Seismic Hazard Zone Report 098, Section 2, 2004.

<sup>35</sup> Geosphere Consultants, Inc., *op. cit.*

earthquake-induced landsliding.<sup>36</sup> The analysis concluded that the landslide potential was low, given the hard nature of the colluvium mantling the bedrock and the relative thickness of the colluvium on the steeper slope uphill of the proposed development area. The assessment noted that despite the uncontrolled concentrated runoff conveyed across the site by the historic graded trail/two-track road, erosion to the slope has been limited to shallow rills, finding that this condition is a testament to the competence of the colluvium underlying the site.

Furthermore, there are two hard clay, colluvium-filled swales on the moderate to gentle slope of the site that show no evidence of impending failure in the form of tension cracks, topographic escarpments, or bulbous downslope profile that would be reflective of accelerated creep, and there is no photogeologic evidence of landslide debris accumulation in the past 100-plus years. Additionally, there are steep cut slopes bordering the west side of the site that have remained intact for more than 60 years without evidence of instability. The geotechnical consultant concluded that the proposed development would enhance the adjoining slope conditions by capturing and rerouting surface runoff away from slopes to the on-site storm drain. The results of the landslide screening analysis reinforced the geotechnical consultant's conclusion that, with implementation of the recommended drainage controls, grading controls, and structural design features presented in the geotechnical report, there is little potential for increased risk of landsliding to occur on the site. As previously noted, the Union City Building Division and Public Works Department will ensure that the project design incorporates the recommendations in the geotechnical report. Therefore, landslide potential would be minimized, and this would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Result in substantial soil erosion or the loss of topsoil?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Any construction project that exposes surface soils creates a potential for erosion from wind and stormwater runoff. The potential for erosion increases on large, steep, or windy sites; it also increases significantly during rainstorms. The project site is particularly susceptible to erosion due to its hilly terrain and exposure to westerly winds. There is more than 150 feet of elevation variation on the relatively small 6-acre site, producing both gentle and steep slopes, with gradients ranging from about 16 percent to 55 percent. There is a moderate to steep cut slope adjacent to the western edge of the site that was graded to accommodate the adjacent park driveway and parking area. This area would also be susceptible to erosion during construction-related disturbance of the site.

Although the historic graded trail that diagonally crosses the site conveys uncontrolled concentrated runoff across the site in a manner conducive to erosion effects, as noted in the preceding subsection, the geotechnical investigation found that erosion to the slope has been limited to shallow rills, indicating that the underlying colluvium is quite stable. The existing grassland and scrub vegetation on the site also stabilize the site and prevent significant erosion in current conditions. However, once this vegetation has been removed and grading of the site commences, the site would be highly vulnerable to erosion, which would adversely affect adjacent Seven Hills Park and would introduce high sediments loads into downstream receiving waters.

<sup>36</sup> California Geological Survey, Earthquake Zones of Required Investigation: Niles Quadrangle [map], October 19, 2004.



Following completion of construction, the site would remain vulnerable to erosion due to the site slopes, exacerbated by the site's expansive colluvial clay soils. Such soils adjacent to pavements and structures could experience excessive shrink-swell in response to extreme seasonal temperature variations, potentially leading to fissuring of the soil, making it more erodible. However, the geotechnical investigation prepared for the project includes recommendations for overexcavating the expansive soils and replacing them with compacted non-expansive soils, along with other recommendations for minimizing erosion effects. Consistent with City policy, the applicant will be required to implement the recommendations in the geotechnical report, which would ensure that post-construction erosion impacts are not significant.

Construction-related site disturbance and grading is expected to occur throughout the subsequent rainy seasons, which would substantially increase the potential for erosion at the site. In addition, roughly half of the 6-acre site would be disturbed by grading, increasing the potential for exposure of soils to the erosional effects of wind and rain. Therefore, the potential for erosion during project construction would be high and would be considered a potentially significant impact on the environment. This impact could be reduced by allowing grading operations to continue only during the dry season and then stabilizing the graded areas as soon as possible after the rough grading has taken place by means such as hydro-seeding to reestablish the ground cover. The required implementation of a Stormwater Pollution Prevention Plan (SWPPP), discussed in Section X, would ensure that erosion potential would be minimized during project construction. However, due to the close proximity of existing homes downslope of proposed lots 1, 2, and 3, there is potential for site grading activities to dislodge soil, which could roll downhill into the adjacent residential properties. To reduce this **potentially significant impact** to a less-than-significant level, the applicant shall implement the following mitigation:

**Mitigation Measure GS-1:** Prior to the initiation of site grading, the construction contractor shall erect a silt barrier fence along the site boundary along the northwest side of the site, downslope of proposed lots 1, 2, and 3.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The potential for landslide is discussed in Section VII-a-iv, above. The potential for liquefaction and lateral spreading are addressed in Section VII-a-iii. The site is underlain by moderately hard to hard Claremont shale and sandstone mantled by a thin veneer of very stiff to hard sandy, silty clay colluvium. The surficial colluvial soil was found to be very resistant to excavation during the geotechnical investigation, which the geologist concluded represents secondary cementation. These conditions do not demonstrate susceptibility to subsidence or collapse. No other types of seismically-induced ground failure were identified in the geotechnical investigation report, which concludes that there are no geologic hazards constraining the proposed project. As previously noted, the applicant will be required to implement the recommendations in the geotechnical report and comply with all applicable building codes and seismic requirements, which would ensure that the proposed homes

would not be exposed to unstable ground that could result in structural failure. This would therefore be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The high clay content of the surficial colluvial soils on the site renders the soils highly expansive, which could affect their stability. The geotechnical report recommends that expansive soils underlying and in proximity to proposed building foundations and pavements be overexcavated and replaced with moisture-conditioned, compacted non-expansive soils placed in engineered lifts with a maximum height of 8 inches. Because the applicant will be required to implement the recommendations in the geotechnical report and comply with the site preparation, foundation, and structural design requirements of the California Building Code, including provisions for expansive soils, the project would not be subject to structural failure due to expansive soils. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** The project would utilize the existing sanitary sewer system that serves the project area; septic tanks or alternative wastewater disposal systems would not be required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Paleontological resources are the fossilized remains of vertebrate or invertebrate organisms from prehistoric environments found in geologic strata. They are valued for the information they yield about the history of the earth and its past ecological settings. They are most typically embedded in sedimentary rock foundations, and may be encountered in surface rock outcroppings or in the subsurface during site grading.

The geological investigation report prepared for the project states that regional geologic mapping prepared in 1980 showed that the project area occupies the southwest flank of a northwest-trending synclinal fold comprised of a complexly deformed sequence of unconformable Tertiary non-marine and marine sedimentary rocks underlain by a conformable sequence of Cretaceous-period marine sedimentary rock, including Knoxville shale. Subsequent mapping in 1992 showed a more complex northwest-trending, fault-bound sequence of Tertiary non-marine and marine sedimentary rocks with the site underlain by steep, northwest-dipping chert and siliceous shale comprising the upper member of the Miocene marine Claremont Formation. These subsurface conditions could be favorable to the presence of paleontological resources.

If any unique paleontological resources were encountered during project construction, they could be damaged, destroyed, or lost during subsurface disturbance of the site. This would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce this potential impact to less than significant:

**Mitigation Measure GS-2:** If any paleontological resources—such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions—are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). Any further mitigation measures recommended by the paleontologist shall be implemented and construction shall not resume in the vicinity of the find until the paleontologist has authorized the resumption of work. Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).

## **VIII. GREENHOUSE GAS EMISSIONS** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Greenhouse gases (GHGs) refer to gases that trap heat in the atmosphere and contribute to global warming. The primary GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (NO<sub>x</sub>), sulfur hexafluoride (SF<sub>6</sub>), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H<sub>2</sub>O). The majority of GHG emissions in the Bay Area come from transportation (39.7 percent), followed by industrial/commercial sources (35.7 percent) and electricity generation (14.0 percent).

percent). Construction equipment and other off-road equipment contribute 1.5 percent of the total GHG emissions.<sup>37</sup>

As discussed in more detail in Section III-b, the BAAQMD *CEQA Air Quality Guidelines* contain operational screening criteria for a variety of land use development projects. In addition to the screening thresholds for criteria air pollutants discussed in Section III-b, there are also screening criteria for GHGs. For single-family residential development, the GHG screening threshold is 56 dwelling units. BAAQMD has determined that single-family residential projects smaller than 56 dwelling units have no potential to exceed the adopted thresholds of significance for GHGs, and a quantified analysis of the project's potential emissions of GHGs is not necessary. Therefore, the proposed project, which consists of only six single-family homes, would have a ***less-than-significant impact*** from its emissions of GHGs.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** There are a variety of Statewide plans, policies, and regulations that have been adopted since 2002 for the purpose of reducing GHG emissions, as well as the City's *Climate Action Plan* (CAP) adopted in 2010.<sup>38</sup> Most notably, California passed landmark climate change legislation with Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, which requires Statewide GHG emissions to be reduced to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. This goal was initially established by former Governor Arnold Schwarzenegger's issuance in 2005 of Executive Order S-3-05, which also set a target of reducing GHG emissions to 80 percent below 1990 levels by 2050.

The State's GHG reduction goals were further focused by Executive Order B-30-15, issued on April 29, 2015 by then-Governor Edmund G. Brown. This order established a mid-term GHG Statewide reduction goal of 40 percent below 1990 levels by 2030. This requirement was codified by the Legislature with the 2016 passage of Senate Bill (SB) 32. The California Air Resources Board (CARB) has developed a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the reduction goals established by these executive orders and legislative acts. The third update to the Scoping Plan, adopted by CARB in late 2017, notes that local governments are essential partners in achieving California's GHG reduction goals.<sup>39</sup>

In November 2010, the City Council adopted a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions 20 percent below 2005 levels by 2020. The CAP included implementation measures within six action areas with the potential to reduce GHG emissions by 22.8 percent below 2005 levels by 2020. These six action areas addressed: land use, transportation, energy, water, waste, and green infrastructure. A 2010 GHG inventory update was prepared that showed GHG emission levels dropping by 4 percent, indicating that the City has made substantive progress on achieving its reduction goal.

<sup>37</sup> Bay Area Air Quality Management District, *Bay Area Emissions Inventory, Summary Report: Greenhouse Gases, Base Year 2011*, Table F: 2011 Bay Area GHG Emissions by Sector, updated January 2015.

<sup>38</sup> City of Union City, *Union City Climate Action Plan*, November 2010.

<sup>39</sup> California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.

State law allows cities to analyze and mitigate significant GHG emissions in a CAP or GHG reduction plan that meets certain requirements under CEQA. Later project-specific CEQA documents may tier from and/or incorporate the CAP or GHG reduction plan by reference.<sup>40</sup> The Union City CAP was developed to serve as the City's qualified GHG Reduction Plan and programmatic tiering document for the purposes of the CEQA for analysis of impacts of GHG emissions and climate change. BAAQMD accepted the CAP as a qualified GHG Reduction Plan on October 6, 2010. In addition, the City has determined that the Reduction Target under the CAP will result in GHG emissions from activities covered by the CAP to be less than cumulatively considerable under CEQA. The City Council adopted a Negative Declaration for the CAP on October 26, 2010.

The CAP and its environmental review may be relied upon for the programmatic analysis of GHG emissions and climate change for future proposed projects if the following standards are met:

- The project supports or includes applicable strategies and measures, or advances the actions identified in the CAP.
- The project is consistent with the ABAG population growth projections, which are the basis of the GHG emissions inventory's projections.
- The project would not substantially interfere with implementation of CAP strategies, measures, or actions.

The project proposes the development of six new residences on the project site, which is consistent with applicable City requirements and is consistent with the ABAG population growth projections. As regards to the CAP's GHG reduction strategies and measures, the majority of the measures require implementation by the City and are not directly applicable to new development projects. All of the CAP measures, including those requiring implementation by the City as well as those pertaining to new buildings or land uses, were reviewed to identify those potentially relevant to the proposed project. The project could participate in or further the City's attainment of the following CAP measures:

#### E-4: Building Performance Standards for New Construction

**Measure E-4.1:** Continue to implement the Green Building Ordinance.

**Consistency/Relevance:** Since adoption of the Climate Action Plan, the City's Green Building Ordinance was modified to remove references to private development projects as these projects are subject to the California Green Building Standards Code, which are more stringent than the provisions previously listed in the City's Green Building Ordinance. The project would be required to comply with the applicable provisions of the Green Building Standards Code, and thus would be consistent with this GHG reduction measure.

#### E-5: Smart Grid

**Measure E-5.1:** Work with PG&E and other cities in Alameda County to accelerate Smart Grid integration in existing and new buildings.

**Consistency/Relevance:** Although this reduction measure is not directly applicable to the proposed project, a smart meter would be installed in the building, furthering this objective of the City.

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<sup>40</sup> California Natural Resources Agency, Governor's Office of Planning and Research, *CEQA Guidelines*, Section 15183.5, as amended December 28, 2019.



#### WR-1: Waste Reduction Policies

##### **Measure WR-1.1:** Increase Waste Diversion Target.

**Consistency/Relevance:** Measure WR-1.1 calls for the City to increase its solid waste reduction and diversion target from 75 percent by 2010 to 90 percent by 2020. By complying with the City's Construction and Demolition Debris (C&DD) Ordinance—which requires the recycling of at least 50 percent of construction and demolition debris generated by a project and 100 percent of all cement, concrete, asphalt concrete, non-contaminated soils, land-clearing debris and plant debris—the project applicant would assist the City in accomplishing its ultimate waste diversion goal.

#### WR-1: Waste Reduction Policies

##### **Measure WR-1.2:** Strengthen Construction & Demolition Standards.

**Consistency/Relevance:** As noted above, the project will comply with the City's Construction and Demolition Debris (C&DD) Ordinance. By complying with this requirement, the project would support Measure WR-1.2.

#### WC-1: Water Conservation Policies

##### **Measure WC-1.1** Water Efficient Landscape Ordinance

**Consistency/Relevance:** As discussed in more detail in Section XIX-b, the project would be required to comply with the water-efficient landscape requirements set forth in the City's Water Efficient Landscape Ordinance, which was recently updated to reflect updates contained in the State Model Water Efficient Landscape Ordinance (per Governor's Executive Order B-29-15 Ordinance). By complying with the plant selection, irrigation system, and other requirements, the water demand for the project's proposed landscaping would be minimized and the project would be supportive of CAP Measure WC-1.1.

#### GI-1: Green Infrastructure Policies

##### **Measure GI-1.1** Carbon Sequestration

**Consistency/Relevance:** Measure GI-1.1 calls for a Community Tree Program to plant 5,000 new public trees by 2020, with at least 500 trees added per year. This measure includes an action to help qualifying neighborhoods to increase their canopy cover to 40 percent or higher, as well as an action to promote shade tree planting on private property, achieving planting of 100 shade trees per year. The trees proposed on project landscape plans include shade trees such as coast live oak, valley oak, and red flowering gum tree. Planting of these trees would be supportive of CAP Measure GI-1.1.

Through compliance with the City's Construction and Demolition Debris Ordinance and Water Efficient Landscape Ordinance, the project would support the CAP GHG reduction measures most applicable to the project. There are no elements of the project that would substantially interfere with implementation of CAP strategies, measures, or actions. Therefore, based on the criteria for CAP consistency listed above, the project would be consistent with the Union City CAP and, therefore, its GHG emissions would have a ***less-than-significant impact*** on the environment.

**IX. HAZARDS AND HAZARDOUS MATERIALS** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The proposed project would not involve the routine transport, use, or disposal of hazardous materials. While construction of the project could entail transport and use of hazardous materials for equipment operation and maintenance, such as motor oil, transmission fluid, or solvents, such use would not be in quantities large enough to pose an environmental hazard, nor would it constitute routine, ongoing use. Such use is typical of most construction projects and does not represent a significant hazard. Once construction is complete and the project is occupied, residential occupants of the site would be expected to store and use small containerized quantities of hazardous household, outdoor landscape care, and automotive products of a wide variety. This type of usage is typical of all residential development, and would not constitute a significant hazard to the public or the environment. The project would have a **less-than-significant impact** from the transport, use, or disposal of hazardous materials.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** As discussed in Section IX-a above, the proposed project would not introduce hazardous materials beyond those generally found within residential uses, including containerized household, yard care, and automotive products.

There are no active permitted underground storage tank (UST) facilities, leaking underground storage tank (LUST) cleanup sites, or other hazardous materials release sites on the project site or within a 1,000-foot radius of the site as tracked by the State Water Resources Control Board (SWRCB) on its GeoTracker database.<sup>41</sup> In addition, there are no hazardous waste or hazardous materials release sites within a 1,000 feet of the project site listed on the California Department of Toxic Substances Control's EnviroStor database (which includes Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites,

<sup>41</sup> California Environmental Protection Agency, State Water Resources Control Board, Groundwater Ambient Monitoring & Assessment Program (GAMA), GeoTracker GAMA Groundwater Data Sources, Accessed May 30, 2019 at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=312+Florence+Street%2C+Union+City%2C+CA>.

Permitted Hazardous Waste Facilities, Post Closure and Hazardous Waste Facilities, and Historical Non-Operating Hazardous Waste Facilities).<sup>42</sup>

There is no known documented historical use of hazardous materials on or in the vicinity of the project site. Historical aerial photographs dating back to 1946 and historical topographic maps dating back to 1906 were reviewed as part of this environmental review and there was no evidence identified in any of the photos or maps examined that there has ever been any industrial land use on the project site or other use that typically entails use of hazardous materials (e.g., gas station) that could have resulted in contamination of soil or groundwater at the site.<sup>43</sup> There was no evidence of prior agricultural production on the site, which could entail the application of pesticides or herbicides that could result in contamination of near-surface soils.

The project site lies at the edge of residential development that has been present since the mid-1960s. Historically, the area was used for livestock grazing. There is no evidence of hazardous materials ever being used or stored on or in proximity to the site. There would be **no impact** from release of hazardous materials into the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no schools near the project site. The closest school is the Learn and Play Montessori School, located at 35699 Niles Boulevard in Fremont, more than three-quarters of a mile from the site. Furthermore, the proposed residential use would not emit hazardous emissions, handle hazardous materials, or generate hazardous waste. There would be **no impact** on schools related to hazardous materials as a result of project implementation.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 actually consists of several lists, including:

<sup>42</sup> California Department of Toxic Substances Control, EnviroStor Data Base of Cleanup Sites and Hazardous Waste Permitted Facilities, accessed May 30, 2019 at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=312+Florence+Street,+Union+City,+CA>.

<sup>43</sup> Netronline, Historical Aerials, accessed May 31, 2019 at: <https://www.historicaerials.com/viewer>.

- A list of hazardous waste sites compiled by the California Department of Toxic Substances Control (DTSC);
- A list of contaminated water wells compiled by the California Department of Health Services (DHS) (subsequently reorganized into the California Department of Health Care Services and the California Department of Public Health);
- A list of leaking underground storage tank sites and solid waste disposal facilities from which there is a migration of hazardous waste, compiled by the State Water Resources Control Board (SWRCB); and
- A list of solid waste disposal facilities from which there is a migration of hazardous waste, compiled by the Local Enforcement Agency (LEA). These lists are consolidated by the Department of Resources Recycling and Recovery (CalRecycle).

Each of these lists must be updated at least annually, and must be submitted to the Secretary for Environmental Protection, the head of the California Environmental Protection Agency (CalEPA). DTSC maintains the EnviroStor database for purposes of complying with Section 65962.5, while the SWRCB maintains the GeoTracker database. As discussed in Section VIII(b), both of these databases were consulted during this environmental review. The project site is not listed on the EnviroStor or GeoTracker databases and there were no hazardous waste sites or facilities identified within 1,000 feet of the project site on either database. There would be **no impact** related to hazardous materials sites compiled pursuant to Government Code Section 65962.5.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no airports near the project site; the nearest public airport is Oakland International Airport located more than 14 miles northwest of the site. The proposed project would not expose people to a safety hazard from airport operations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no private airstrips in the vicinity of the project site. The nearest private airstrip is Hayward Executive Airport, located about 7.5 miles northwest of the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) <i>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** The project would not block or impede access to emergency evacuation routes, and the development of six single-family homes would not have the potential to interfere with implementation of the City's disaster management operations plan or emergency response procedures adopted by any local service providers.

The City's 2014 *Comprehensive Emergency Management Plan* (CEMP) was reviewed to identify any potential conflicts that could be caused by the proposed project. The CEMP details procedures and responsibilities during disasters for a wide range of potential emergencies, including civil disturbance, dam failure, earthquake, flood, hazardous materials spill, train derailment, landslide, terrorism, wildfire, and more. It identifies the Ruggieri Senior Center at 33997 Alvarado-Niles Road (approximately 0.45 mile southwest of the project site) as the City's primary Emergency Operations Center.

The project site is located in Area 5, one of five evacuation areas with possible sites for Refuges of Last Resort in the event of a large-scale catastrophic event that could involve evacuation of half or more of the population. Area 5 includes one of the City's two primary concentrations of population. Within Area 5, Guy Emanuele Jr. Elementary School, located about 1 mile northwest of the project site, and Shorty Garcia Park, located adjacent to this school, are identified as possible sites for a Refuge of Last Resort during a need to terminate evacuations. Charles F. Kennedy Community Park, located just over 1 mile to the west of the site, is also listed as a Shelter Site.

The proposed project would not interfere with evacuation procedures if they became necessary and would not otherwise impair implementation of the CEMP.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) <i>Expose people or structures to 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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Government Code Section 51178 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of high fire hazard within Local Responsibility Areas (LRAs) that are not under the direct jurisdiction of CAL FIRE, where local fire-fighting agencies have primary responsibility for fire response. CAL FIRE's mapping of Very High Fire Hazard Severity Zones (VHFHSZs) is based on data and models of potential fuels over a 30- to 50-year time horizon and their expected fire behavior and burn probabilities. The project site and all surrounding lands are designated as an LRA, but they are not within a VHFHSZ.<sup>44</sup> Although there are numerous trees in Seven Hills

<sup>44</sup> California Department of Forestry and Fire Protection (CAL FIRE), Alameda County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE [map], September 3, 2008.



Park, located immediately to the south of the project site, the site lies at the edge of an extensive area of urban development and there are no wildlands in proximity to the site. Therefore, the potential for wildfire at the project site is extremely low.

**X. HYDROLOGY AND WATER QUALITY** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:**

***Construction Impacts***

Construction activities could potentially affect water quality as a result of erosion of sediment. In addition, leaks from construction equipment; accidental spills of fuel, oil, or hazardous liquids used for equipment maintenance; and accidental spills of construction materials are all potential sources of pollutants that could degrade water quality during construction. Stormwater runoff from the site is ultimately discharged, without treatment, to San Francisco Bay, which is on the list of impaired water bodies compiled by the San Francisco Bay Regional Water Quality Control Board (RWQCB) pursuant to the federal Clean Water Act. Because the State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these water bodies, uncontrolled discharge of pollutants into them is considered particularly detrimental.

Generally, new development that entails "land disturbance" of 1 acre or more requires the project sponsor to obtain coverage under Construction General Permit (CGP) Order 2009-0009-DWQ, administered by the RWQCB. With a site area of 6.01 acres, at least half of which would be graded, the project would be required to obtain coverage under the CGP. Order 2009-0009-DWQ requires project sponsors to implement construction Best Management Practices (BMPs) at the project site and comply with numeric action levels (NALs) in order to achieve minimum federal water quality standards. The CGP requires control of non-stormwater discharges as well as stormwater discharges. Measures to control non-stormwater discharges such as spills, leakage, and dumping must be addressed through structural as well as non-structural BMPs.

Construction stormwater BMPs are intended to minimize the migration of sediments off-site. They can include covering soil stockpiles, sweeping soil from streets or other paved areas, performing site-disturbing activities in dry periods, and planting vegetation or landscaping quickly after disturbance to stabilize soils. Other typical stormwater BMPs include erosion-reduction controls such as hay bales, water bars, covers, sediment fences, sensitive area access restrictions (for example, flagging), vehicle mats in wet areas, and retention/settlement ponds.

To obtain coverage, the applicant must electronically file a number of permit-related compliance documents referred to as Permit Registration Documents (PRDs). The required PRDs include a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified

SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). Once filed, these documents become immediately available to the public for review and comment.

Although project construction effects on surface water quality could result in a potentially significant impact on water quality, obtaining the required coverage under the CGP and implementing the required SWPPP would ensure that construction impacts on water quality remain ***less than significant***.

Union City General Plan Policy RC-3.3 also requires preparation and implementation of an Erosion Control Plan for new construction and ensures, through on-site inspections, that the Erosion Control Plan is being properly implemented during project construction.

### ***Operational Impacts***

The primary source of water pollutants from residential development is from automotive vehicles traveling on site roadways. Moving vehicles deposit oil and grease, fuel residues, heavy metals (e.g. lead, copper, cadmium, and zinc), tire particles, and other pollutants. They emit polycyclic aromatic hydrocarbons (PAHs) from their exhaust, resulting from incomplete combustion of gasoline, which settles to the ground. Even parked vehicles can deposit oil and other pollutants. All of the pollutants described above collect on the impervious pavements, where they can be washed by stormwater into downstream surface waters, thereby degrading water quality. Pesticides that may be used on landscaping or around buildings can potentially contribute to the depletion of dissolved oxygen and/or toxic concentrations of dissolved ammonia in downstream receiving waters, creating acute toxicity for aquatic wildlife.

Buildings and equipment enclosures also provide potential sources of water pollutants because weathered paint and eroded metals from painted and unpainted surfaces can be washed away by stormwater. In addition, mercury and polychlorinated biphenyls (PCBs) that get deposited on roofs and other impervious surfaces as airborne pollutants can be washed into surface waters during storm events. Microbial pathogens are yet another pollutant that can be entrained in stormwater coming in contact with poorly protected trash collection areas, though this is more of a problem with multi-family residential development than single-family homes.

Operational stormwater discharges from new development are regulated under the National Pollutant Discharge Elimination System (NPDES), administered by the RWQCB under authority of the U.S. Environmental Protection Agency. In accordance with the NPDES, the RWQCB regulates stormwater discharges via municipal stormwater permits issued to the cities, counties, water districts, and flood control districts under its jurisdiction in the San Francisco Bay Area. In the City of Union City, development projects must comply with NPDES Permit No. CAS612008, issued to the Alameda Countywide Clean Water Program (ACCWP)<sup>45</sup> and other Bay Area jurisdictions by the RWQCB (NPDES Order No. R2-2015-0049). The revised Municipal Regional Stormwater Permit (MRP) was adopted on November 19, 2015 and became effective on January 1, 2016. This permit replaced the previous permit issued on October 14, 2009, which was formally rescinded by the RWQCB. The current MRP consolidates the multiple countywide permits previously issued to member agencies in the San Francisco Bay Area under a single MRP regulating 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.

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<sup>45</sup> Although the named Permittee in the MRP is Alameda Countywide Clean Water Program, this organization is also referenced on its website as Clean Water Program Alameda County as well as Alameda Countywide Clean Water Program.

Although the MRP imposes a variety of responsibilities for monitoring and protecting stormwater quality on member agencies, it also includes requirements for individual development projects. Specifically, Provision C.3 of the MRP requires any private or public development project that would create or modify 10,000 square feet or more of impervious surfaces to take measures to improve water quality of stormwater discharges from the project site (i.e., stormwater runoff), including providing treatment of 100 percent of the stormwater runoff from the site. The size threshold is reduced to 5,000 square feet for certain special land use categories, which include auto service facilities, retail gasoline outlets, restaurants, and uncovered parking lots. Where a redevelopment project would alter 50 percent or more of the impervious surfaces of a previously existing project that was not subject to Provision C.3 requirements, the entire project must be designed and operated in compliance with Provision C.3. The Provision C.3 requirements also pertain to construction or widening of roads, trails, and sidewalks.

In the new MRP, Provision C.3 also requires small projects with 2,500 square feet to 10,000 square feet of new and replaced impervious surfaces and detached single-family home projects that create and/or replace 2,500 square feet or more of impervious surfaces to install at least one site design measure to reduce uncontrolled stormwater runoff. One example of an allowed site design measure is directing roof runoff into cisterns or barrels for reuse. Additional examples are provided below.

Based on current project plans, the proposed project would create 42,830 square feet of new impervious surfaces, including the new access road.<sup>46</sup> Therefore the project would be subject to the full Provision C.3 requirements and must include appropriate site design measures and source controls and hydraulically-sized stormwater treatment measures. Union City General Plan Policy RC-3.4 requires new development to comply with the most recent version of the MRP. Any required stormwater treatment that can't be accomplished on site, such as due to steep slopes or due to the need to minimize the amount of grading, must be accounted for by treating stormwater at a viable off-site location in the County or by paying in-lieu fees that would be used to help build future green infrastructure by the City.

Projects subject to Provision C.3 must include low-impact development (LID) measures to capture and perform onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. (Treatment may also occur offsite at an approved joint stormwater treatment facility.) Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable* (MEP), a standard established by the 1987 amendments to the federal Clean Water Act. LID treatment measures include harvesting and reuse, infiltration, evapotranspiration, and biotreatment.

Provision C.3 LID requirements include source controls and site design and stormwater treatment requirements. Examples of source control requirements that could be relevant to the proposed project include:

- Landscaping that minimizes irrigation and runoff, promotes surface infiltration, minimizes the use of pesticides and fertilizers, and incorporates other appropriate sustainable landscaping practices and programs such as Bay-Friendly Landscaping;
- Efficient irrigation systems;
- Properly designed trash storage areas; and
- Storm drain system stenciling or signage.

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<sup>46</sup> Dilip S. Kishnani, Stormwater Requirements Checklist, Municipal Regional Stormwater Permit (MRP 2.0), Stormwater Controls for Development Projects, July 22, 2019.

The MRP states that permittees (i.e., the cities and counties) should encourage projects that do not meet the Provision C.3 size thresholds to still implement these source control measures to the extent feasible.

Examples of site design and stormwater treatment requirements that could be relevant to the proposed project include:

- Conservation of natural areas, including existing trees, other vegetation, and soils;
- Minimization of impervious surfaces;
- Construction of sidewalks, walkways, patios, and/or parking lots with pervious pavements;
- Minimization of stormwater runoff by directing runoff from roofs, sidewalks, walkways, driveways, and/or uncovered parking lots onto vegetated areas; and
- Treatment of 100 percent of the site's stormwater runoff with onsite LID treatment measures (or with LID treatment measures at a joint stormwater treatment facility) through harvesting and re-use, infiltration, evapotranspiration, or biotreatment.

Biotreatment (or bioretention) systems must be designed to have a surface area no smaller than what is required to accommodate a 5 inches/hour stormwater runoff surface loading rate, and infiltrate runoff at a minimum of 5 inches per hour during the life of the facility. The planting and soil media for biotreatment (or bioretention) systems must be designed to sustain healthy, vigorous plant growth and maximize stormwater runoff retention and pollutant removal. Biotreatment soil media must meet minimum specifications. Green roofs may be considered biotreatment systems provided they meet the criteria for treatment capacity stipulated in the MRP and have a sufficient depth of planting media to support the long-term health of the vegetation selected for the green roof.

The size and capacity of required stormwater treatment systems is determined in part on historical rainfall records for the project area. Systems may be based on the volume of runoff, the peak flow rate of runoff, or a combination of the two, with numeric hydraulic design criteria stipulated in the MRP for each method.

In certain cases where an applicant can demonstrate the infeasibility of treating 100 percent of the runoff from a project site, there are provisions for payment of an in-lieu fee for treatment of the untreated portion of stormwater at a regional or municipal treatment facility. Provision C.3 also defines three categories of "special projects" (Category A, B, and C) that may be eligible for a reduction in the amount of stormwater they are required to treat via Incentive LID Treatment Reduction Credits that must be approved by the RWQCB. Special projects are generally land development projects that can be characterized as infill, smart growth, high-density, or transit-oriented development that can either reduce existing impervious surfaces or create less "accessory" impervious areas and automobile-related pollutant impacts. The LID Treatment Reduction Credits allow the treatment of a stipulated portion of the site's runoff with non-LID treatment systems, such as tree box high-flow-rate bio-filters or vault-based high-flow-rate media filters. The proposed project would not meet the criteria for any of the special projects defined in Section C.3.e.ii of the MRP.

Based on the City's C.3 Stormwater Requirements Checklist completed for the project by the applicant, the project would include the following site design measures:

- Runoff from driveways would be directed into vegetated areas;
- The amount of land disturbance and impervious surfaces created would be minimized;
- Permeability of the site would be maximized by clustering development and preserving open space;
- Changes to the natural topography would be minimized;

- Self-treating areas would be included; and
- Interceptor trees would be planted.

Provision C.3 of the MRP also includes hydromodification management (HM) requirements for certain projects located in areas susceptible to hydrograph modification. Hydrograph modification occurs when an undeveloped site is developed with impervious surfaces such as buildings and pavements, which prevents natural infiltration by rain water, and which results in an increase in the volume and rate of stormwater runoff from the site. Hydrograph modification has the undesirable effect of increasing erosion of natural creeks and earthen channels, which can cause flooding, property damage, degradation of stream habitat, and deterioration of water quality.

Projects that create or replace 1 acre or more of impervious surfaces on sites within a designated “susceptible area” as mapped by the ACCWP must implement HM measures to minimize changes in the rate and flow of stormwater runoff in comparison with pre-project conditions. The MRP includes provisions for compliance with the HM requirements in cases where meeting the HM standard is not practical due to excessive cost (more than 2 percent of project construction costs) or extreme space limitations.

For Alameda County permittees, the HM controls must be designed such that the post-project discharge rates and durations match pre-project discharge rates and durations ranging from 10 percent of the pre-project 2-year peak flow up to the pre-project 10-year peak flow. HM measures can include site design and hydrologic source control measures, on-site structural HM measures, regional HM control structures, in-stream restorative measures, or a combination thereof. However, in-stream measures may only be used when the receiving stream is in a hardened channel or already shows evidence of excessive sediment, erosion, or deposition.

The project site is located within an area subject to HM requirements, as shown on the HMP Susceptibility Map attached to the Alameda County MRP.<sup>47</sup> It is located in an area identified as “hill or high slope region (susceptible).” Although projects creating or replacing more than 1 acre of impervious surfaces in these susceptible areas are subject to the HM requirements, they will not apply if a project proponent can demonstrate that all project runoff will flow through enclosed storm drains, existing concrete culverts, or fully hardened (with bed and banks continuously concrete-lined) channels to the tidal area in the western portion of the City. With 42,830 square feet (0.98 acres) of new impervious surfaces proposed, the project is just below the threshold for the HM requirements.

Though just below the 1-acre threshold for HM requirements, the 42,830 square feet of new impervious surfaces that would be created by the proposed project would be well in excess of the 10,000-square-foot Provision C.3 threshold for onsite treatment. However, due to the steep slopes on the project site, providing the requisite on-site treatment facilities is impractical, so the City has agreed to allow the applicant to pay a stormwater in-lieu fee of \$90,000 per acre of new impervious surfaces. (This provision will be added to the Development Agreement between the applicant and the City.) The MRP explicitly allows the payment of in-lieu fees as an alternative to compliance with Provision C.3, but stipulates that in addition to the fees, a portion of the runoff from the project’s drainage area must be treated by LID treatment measures onsite or at a joint regional stormwater treatment facility that discharges into the same watershed and achieves a net environmental benefit.<sup>48</sup> In accordance with the MRP, in-lieu fees must be sufficient to provide both hydraulically-sized treatment with LID

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<sup>47</sup> Alameda Countywide Clean Water Program, *C.3 Stormwater Technical Guidance: A Handbook for Developers, Builders, and Project Applicants*, Version 6, Attachment A: HMP Susceptibility Map (January 26, 2007), October 31, 2017.

<sup>48</sup> California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. C612008, Provision C.3.e.i.(2), November 19, 2015.



treatment measures of an equivalent quantity of stormwater runoff and pollutant loading, and a proportional share of the operation and maintenance costs of the regional treatment facility.

Payment of the in-lieu fee will assist the City in paying for future development of stormwater treatment and detention infrastructure in the City's public spaces. The project would include onsite LID treatment measures, described below; in conjunction with the in-lieu fee, this would constitute compliance with the MRP and with Union City General Plan Policy RC-3.4, which stipulates that the City will require new development to comply with the most recent version of the MRP and incorporate appropriate LID site design and source control measures into the project.

In addition to paying the City a stormwater in-lieu fee, the project would include the following onsite LID site design and source control measures:

- Landscaping that minimizes irrigation and runoff, promotes surface infiltration, minimizes the use of pesticides and fertilizers, and incorporates other appropriate sustainable landscaping practices and programs such as Bay-Friendly Landscaping;
- Efficient irrigation systems;
- Storm drain system stenciling or signage.
- Conservation of natural areas, including existing trees, other vegetation, and soils;
- Minimization of impervious surfaces;
- Construction of driveways with pervious pavements; and
- Minimization of stormwater runoff by directing runoff from roofs, sidewalks, walkways, driveways, and/or uncovered parking lots onto vegetated areas.

The City will verify the inclusion of these features and payment of the in-lieu fee as part of the project's entitlement process. Therefore, the project would comply with the Provision C.3 stormwater requirements, and would have a **less-than-significant operational impact** on water quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The project site is underlain by the Niles Cone Basin groundwater aquifer, which extends across the larger tri-cities area encompassing Union City, Fremont, and Newark.<sup>49</sup> The Niles Cone Basin is an alluvial aquifer system of unconsolidated gravel, silt, and clay that is separated into different levels by the Hayward Fault. The basin's deepest water-bearing units extend to 400 to 500 feet or more below the ground surface (bgs). Water quality in some of the sub-basins below the Hayward Fault is degraded due to saltwater intrusion from San Francisco Bay. The Alameda County Water District (ACWD) has operated an Aquifer Reclamation Program to remove and control the movement

<sup>49</sup>County of Alameda Department of Environmental Health, *Local Agency Management Program for Onsite Wastewater Treatment Systems, Alameda County, California*, Figure 2.2: Major Groundwater Basins, Alameda County LAMP, April 25, 2016.

of intruded saline water since 1974. The program has succeeded in preventing further saltwater intrusion and flushing saltwater from one of the sub-basins, the Newark Aquifer.

Groundwater supplies in the project area are managed by ACWD, which is the domestic water supplier for the cities of Union City, Fremont, and Newark. Following the passage of the Sustainable Groundwater Management Act in 2014, the first legislation to regulate groundwater extraction in California, ACWD was designated by the State as the exclusive local agency to monitor and manage the groundwater in the Niles Cone Basin. The District has developed and implemented eight major groundwater management programs to ensure a reliable long-term supply of high-quality groundwater to meet the present and future needs of its municipal, industrial, recreational, and agricultural customers. The programs include:

- Water Supply Management
- Groundwater Replenishment
- Watershed Protection and Monitoring
- Basin Monitoring
- Wellhead Protection Program
- Aquifer Reclamation Program
- Groundwater Protection Program
- Well Ordinance Administration

ACWD derives 37 percent of its total water supply from groundwater in normal years; over 60 percent comes from groundwater in dry years. In Fiscal Year (FY) 2018/2019 ACWD pumped 19,900 acre-feet (AF) from the basin, which received 23,500 AF in recharge from rainfall, applied water, and recharge at the District's groundwater recharge facilities at Quarry Lakes Regional Recreation Area and adjacent areas, resulting in a net surplus.<sup>50</sup> In general, extraction occurs during dry years and recharge and recovery occur during wet years. The Niles Cone Groundwater Basin is sustainably managed by the District and is not an adjudicated basin, nor is it considered to be in an "overdraft" or "potentially overdraft" condition by the California Department of Water Resources (DWR).<sup>51</sup> ACWD has had a Groundwater Management Policy in place since 1989 that outlines the District's protection and management oversight of the Niles Cone Groundwater Basin via the groundwater management programs listed above.

Although the majority of groundwater recharge of the Niles Cone Groundwater Basin occurs via stormwater runoff to the ACWD's recharge facilities at the Quarry Lakes in Fremont, a portion does come via direct infiltration. Because the project site currently has no development, the only existing surface constraint to infiltration is from the relatively steep topography. However, the high clay content of the underlying soils is also not conducive to infiltration. Development of the project would cover roughly 9 percent of the 6-acre site with impervious surfaces, which would incrementally reduce the potential for groundwater recharge at the site. However, given the relatively small role infiltration plays overall in recharging the groundwater table, the existing constraint to infiltration due to the topography of the project site and the nature of the underlying soils, and the miniscule project site area relative to the total groundwater basin, there is little potential for the proposed project to 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. No groundwater would be pumped at the project site, so there is no

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<sup>50</sup> Alameda County Water District, *Survey Report on Groundwater Conditions*, Table 3: Annual Overdraft, February 2020.

<sup>51</sup> Alameda County Water District, *Urban Water Management Plan 2015–2020*, Chapter 4: Groundwater, adopted June 9, 2016.

potential for the project to substantially deplete groundwater supplies. While the project would incrementally increase consumption of domestic water provided by the ACWD, a portion of which is derived from groundwater supplies, the incremental increase would be an infinitesimally small percentage of total water demand in the District. Therefore, the project would have a **less-than-significant impact** on groundwater supplies.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</i>				
i) <i>Result in substantial erosion or siltation on- or off-site?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Construction-related impacts relating to erosion or siltation both on and off-site are discussed in Section X-a, and additional discussion is provided in the next subsection. As discussed in Section VII-b, the geotechnical investigation prepared for the project includes recommendations—which the applicant would be required to implement—for minimizing erosion effects that could occur after completion of construction. The project would not alter the course of a stream or river, and the potential adverse effects of the fairly minor changes to existing surface drainage patterns would be minimized through the required construction and post-construction stormwater controls and measures for minimizing erosion. With implementation of these required measures, the project would not result in substantial erosion or siltation on- or off-site. This would be a **less-than-significant impact**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) <i>Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** As discussed in Section X-a, the project would create 42,830 square feet of new impervious surfaces. This would result in increased discharge of stormwater from the project site during storm events. As noted in Section X-a, providing bioretention and stormwater treatment facilities on the site is infeasible due to the hilly nature of the site, but the applicant will be required to pay an in-lieu fee in accordance with General Plan Policy RC-3.4, which would satisfy the regional stormwater treatment requirements and assist the City in developing offsite stormwater treatment and detention facilities. Furthermore, increased stormwater discharge from the site would be minimized by the following project features:

- all driveways would be surfaced with permeable pavers, which would allow for percolation of stormwater falling onto the driveways into underlying soils and the groundwater table under

the site, located at depths of 14 to 23 feet below grade, based on the geotechnical borings conducted at each of the home sites;<sup>52</sup>

- all stormwater runoff from the roofs of the proposed homes would be captured and discharged into the landscaped areas of each home site. The applicant has also committed to working with the City to identify opportunities to reuse the stormwater captured from roofs for irrigation or other beneficial uses.<sup>53</sup>

Some potential site design measures identified in the MRP and encouraged for projects not subject to Provision C.3 regulation include minimizing land disturbance; clustering of structures and pavements; directing roof runoff to vegetated areas (already planned); employing micro-detention, including landscape-based detention; preservation of open space; and protection of riparian areas and wetlands as project amenities (these habitats are not present on the project site).<sup>54</sup> The MRP also encourages non-regulated projects to include adequate source control measures to limit pollutant generation, discharge, and runoff. Source control measures can include:

- Storm drain inlet stenciling;
- Landscaping that minimizes irrigation and runoff, promotes surface infiltration where possible, minimizes the use of pesticides and fertilizers, and incorporates appropriate sustainable landscaping practices and programs, such as Bay-Friendly Landscaping;
- Plumbing of the following discharges to the sanitary sewer, subject to the local sanitary sewer agency's regulations and standards:
  - Discharges from indoor floor mat/equipment/hood filter wash racks or covered outdoor wash racks for restaurants;
  - Dumpster drips from covered trash and food compactor enclosures;
  - Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;
  - Swimming pool water, if discharge to onsite vegetated areas is not a feasible option;
  - Fire sprinkler test water, if discharge to onsite vegetated areas is not a feasible option.

As previously discussed in Section X-a, the project would include many of these site design and source control measures. The upper hillside on the project site would be preserved as open space by a conservation easement. In addition, the rear portions of the residential lots would not be graded or developed. Storm runoff from project roofs would either be captured for reuse on site and/or discharged into landscaped areas. Trash storage areas would be located within enclosed garages. The plumbing discharge prohibitions are not applicable to the project.

While the project would not be required to construct on-site stormwater treatment facilities that would have a secondary benefit of retarding the rate and volume of peak discharge from the site, the proposed LID treatment measures, site design measures, and source control measures described above and in Section X-a would all contribute these functional benefits, such that there would not be a substantial increase in peak stormwater discharged from the site. Furthermore, the City's adopted *2040 General Plan* includes a number of policies that would ensure that stormwater discharge from the site would not create a risk of on- or off-site flooding, including the following:

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<sup>52</sup> Geosphere Consultants, Inc., *op. cit.*

<sup>53</sup> Ramana Chinnakitta, Applicant's Representative, personal communication, August 26, 2020.

<sup>54</sup> California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. C612008, Provision C.3.a.i.(6), November 19, 2015.

**Policy PF-1.2: On-site and Off-site Infrastructure.** The City shall require all new development and major modifications to existing development to construct necessary onsite and off-site infrastructure to serve the project in accordance with City standards.

**Policy RC-3.3: Erosion Control.** The City shall require an erosion control plan for new construction, and shall ensure, through review and inspection, that erosion control is being implemented correctly on construction sites.

**Policy RC-3.4: Compliance with Regional Municipal Stormwater Permit.** The City shall require new development to comply with the most recent version of the San Francisco Bay Regional Municipal Stormwater Permit, which focuses on the incorporation of low impact development measures into development projects to improve the quality of stormwater runoff including, but not limited to, the incorporation of permeable paving, green roofs, cisterns, and biotreatment (e.g. rain gardens, bioretention units, bioswales, and planter/tree boxes) and the preservation of undeveloped open space.

**Policy PF-5.4: Surface Drainage Disposal.** The City shall ensure that new development accommodates surface drainage disposal in one of the following ways:

- a. Positive drainage to a City approved storm drain that uses green infrastructure to pretreat the drainage prior to it entering the City's storm drainage system; or
- b. On site drainage that is retained and treated within the development.

**Policy PF-5.7: Evaluate Need for On-Site Detention and/or Retention Facilities.** The City shall evaluate public and private development projects to determine the effects of the projects on on-site and downstream drainage patterns and associated ecological systems. Projects may require on-site detention or retention facilities to maintain existing storm flows and velocities in natural drainage system. Any new facilities shall incorporate green infrastructure elements identified in the Green Infrastructure Plan to the extent feasible.

**Policy PF-5.8: Minimize Erosion and Silt from Hillside Area.** The City shall continue to work with property owners in the Hillside Area to minimize erosion and conveyance of silt downstream to City drainage facilities.

Enforcement of the applicable general plan policies would further ensure that the project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: There is an existing 18-inch storm drain at the end of Florence Street just southwest of the project site that goes down into the park and connects with the storm drain system there. The City will not permit this existing pipe to be used to carry any drainage from the proposed development. To carry the drainage from the development, a new storm drain pipe will be installed on existing portion of Florence Street to connect to a 24-inch storm drain in Riviera Drive, which connects to a storm drain in Appian Way. Storm runoff from the project site would be collected and drain to new curb inlets that



would be located on either side of the new street at the site's southwestern boundary, where the street extension would begin. These facilities would be connected to the existing storm drain in Riviera Dr. The City will require the size of the new storm drain pipe to be determined based upon the amount of drainage to be carried. An updated hydraulic study will need to be submitted to the City Engineer and Alameda County Flood Control to demonstrate the adequacy of the existing storm drain system to carry the additional drainage.

Section X-c-ii provides a discussion about why the storm runoff from the project would not exceed the capacity of the existing stormwater drainage system and Section X-a provides a detailed discussion about the required on-site stormwater treatment facilities that would ensure the project would not be a substantial source of polluted runoff. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site does not lie within or near a 100-year flood plain.<sup>55</sup> It is within Zone X, Other Areas, which is assigned to areas of 0.2-percent annual chance flood (i.e., 500-year flood), areas of 1-percent annual chance flood (i.e., 100-year flood) with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1-percent annual chance flood. Given the site's hilly terrain, there is no potential for flooding at the site, and Section X-c-ii explains why the project would not cause off-site flooding.

In the San Francisco Bay Area, any potential tsunami would originate in the Pacific Ocean, and to reach the City of Union City, would need to pass through the relatively narrow Golden Gate and into San Francisco Bay, where it would lose much of its energy. The project site is more than 30 miles from the Golden Gate, separated by intervening land masses. Although near-shore (and predominantly undeveloped) areas of Union City are mapped as being within a potential tsunami runup zone, given elevations at the project site in excess of 200 feet above sea level, there is no potential for inundation by tsunami at the site.<sup>56</sup>

A seiche is a free or standing wave oscillation(s) of the surface of water in an enclosed or semi-enclosed basin that may be initiated by an earthquake. There are no large bodies of surface water in proximity to the project site; there is therefore no potential for inundation of the site due to seiche.

With no potential for inundation by flood, tsunami, or seiche, there would be no potential for the project to release pollutants into waters resulting from inundation. The project would have ***no impact*** due to releasing pollutants during inundation of the project site.

<sup>55</sup> Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel Number 06001C0455G, August 3, 2009.

<sup>56</sup> Association of Bay Area Governments, Resilience Program, Tsunami Inundation Area for Emergency Planning, Accessed June 4, 2019 at: <http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami>.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **Water Quality Control Plan**

The *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the master water quality control planning document adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in accordance with the Porter-Cologne Water Quality Control Act of 1969.<sup>57</sup> It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan has been adopted and approved by the State Water Resources Control Board, U.S. Environmental Protection Agency (USEPA), and the Office of Administrative Law, where required.

Among other provisions, the Basin Plan establishes conditions (discharge prohibitions) that must be met at all times. These include restrictions on discharge of wastewater, wastewater sludge, biocides (i.e., pesticides, herbicides, copper, etc.), oils, and a wide range of solid materials, including silt, sand, and clay. Point source discharges must be made in accordance with waste discharge requirements (WDRs) established by the RWQCB in accordance with the NPDES program described in Section X-a.

The Basin Plan is a large and complex document with many specific provisions, policies, and implementation plans all with the overarching goal of protecting water quality for beneficial uses, such as:

- agricultural, municipal, domestic, and industrial supply;
- marine, estuarine, and warm and cold freshwater wildlife habitats;
- commercial and sport fishing;
- navigation;
- preservation of rare and endangered species;
- contact and non-contact water recreation;
- shellfish harvesting;
- fish spawning;
- and more.

Many of the programs and other provisions described in the Basin Plan are not applicable to the proposed project. However, the proposed project would be required to comply with the NPDES regulations pertaining to construction and operation of new development sites, described in detail in Section X-a, above. By complying with the applicable provisions of these regulations, potential water pollutants generated by construction and operation of the project would be minimized and would not adversely affect surface or groundwater quality. Therefore, the project would not conflict with or

<sup>57</sup> California Regional Water Quality Control Board, San Francisco Bay Region, *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*, May 4, 2017.

obstruct implementation of the applicable water quality control plan. This would be a ***less-than-significant*** impact.

### ***Sustainable Groundwater Management Plan***

Despite California's heavy reliance on groundwater, the extraction of groundwater was never regulated until the 2014 passage of a package of bills that collectively formed the Sustainable Groundwater Management Act (SGMA). Senate Bill (SB) 1168, Assembly Bill (AB) 1739, and SB 1319 (which amended AB 1739) established a comprehensive Statewide groundwater management program with the primary goal of achieving sustainable groundwater basins over the next 20 years. Improved groundwater management is intended to provide a water supply buffer during periods of drought.

Rather than regulating groundwater at the State level, the SGMA allocates responsibility for local management of groundwater basins. The basins are to be managed by Groundwater Sustainability Agencies (GSAs), which can be formed by any local agency or coordinated group of agencies for purpose of complying with the SGMA. If no agency is formed, the county is presumed to be the local GSA unless the county explicitly opts out. In some cases, the legislation lists new special districts, which have exclusive authority for managing groundwater within their jurisdictional boundaries.

GSAs have authority to acquire land and water for purposes of recharging the groundwater basin and storing and transporting water. The GSAs must submit annual reports to the California Department of Water Resources (DWR), listing groundwater elevation data, amount of groundwater storage, use of surface water for groundwater recharge (or as water supply), and total use of water within the GSA's boundaries.

The DWR was required by prior legislation to rank the priority of each of the State's 515 groundwater basins and subbasins as either high, medium, low, or very low priority by January 31, 2015. These rankings were made in accordance with the California Statewide Groundwater Elevation Monitoring (CASGEM) program. The CASGEM program considers such factors as the number of public wells in the basin, population served, acreage of land above the basin, reliance on groundwater, history of overdrafting, occurrence of subsidence, degradation in water quality, and other factors.

The SGMA requires Groundwater Sustainability Agencies (GSAs) to form in the State's high- and medium-priority basins and subbasins by June 30, 2017. For groundwater basins designed as medium or high priority, the SGMA requires the responsible GSA to prepare and adopt a Groundwater Sustainability Plan (GSP). Under certain conditions, including where a GSA has performed an analysis that demonstrates the groundwater basin under its purview has been operated within its sustainable yield over a period of at least 10 years, the GSA may prepare an Alternative to a GSP. The GSPs or Alternative GSPs must encompass an entire basin or subbasin and must demonstrate that the basin can achieve sustainable groundwater management within 20 years of adoption of the plan.

The Niles Cone Basin groundwater aquifer that underlies the City of Union City is designated by DWR as a medium-priority basin.<sup>58</sup> The Alameda County Water District (ACWD) has been designated as the exclusive GSA for the Niles Cone groundwater basin.<sup>59</sup> Since the ACWD has completed an analysis of basin conditions that demonstrates that the Niles Cone Subbasin 2-09.01 has operated within its sustainable yield over a period of 10 years, on December 8, 2016, ACWD's Board of Directors adopted Resolution No. 16-075 authorizing staff to submit an Alternative to a Groundwater Sustainability Plan for Niles Cone 2-09.01. ACWD's Alternative submittal will include an explanation

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<sup>58</sup> California Department of Water Resources, Public Affairs Office, Statewide Map of SGMA 2019 Basin Prioritization Results, April 30, 2019.

<sup>59</sup> California Department of Water Resources, Groundwater Sustainability Agencies, GSA Map Viewer [interactive map], Accessed August 18, 2019 at: <https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true>.

of how the Alternative is functionally equivalent to elements of a Groundwater Sustainability Plan and achieves the objectives of SGMA.

Since the ACWD has not yet adopted an Alternative GSP, there is no potential for the proposed project to obstruct the implementation of an applicable GSP. Furthermore, as discussed in Section X-b, no groundwater would be pumped at the project site, and development of the project would have a negligible effect on groundwater recharge at the site. Consequently, there is no potential for the project to substantially interfere with the management of groundwater supplies. This would be a ***less-than-significant*** impact.

## **XI. LAND USE AND PLANNING** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Physically divide an established community?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** The proposed project would expand the existing Seven Hills neighborhood toward the southeast with the development of six new single-family homes. The new area would be accessed via an extension of Florence Street, an existing street. Implementation of the project would not close off any existing roadways and would not construct new roadways or other potential barriers that could physically divide the existing neighborhood, nor would it otherwise create any barriers to existing circulation within the community. Therefore, implementation of the proposed project would not physically divide an established community.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The project site is located within the planning area of the *Union City Hillside Area Plan*, and is therefore subject to the policies of this plan as well as the General Plan that applies to the entire City. Each of these documents was reviewed to evaluate the proposed project's consistency with applicable policies.

### ***General Plan***

The General Plan Land Use Diagram designates the project site as R3-6 – Residential. This designation is intended for detached single-family homes at a density of 3 to 6 dwelling units per acre; it is the preferred residential land use designation for the City, and is intended as the “anchor” land use in areas where adequate urban services are available. The R3-6 designation allows lot sizes of

6,000 to 10,000 square feet. With six dwelling units proposed for the 5.6-acre site, the project would have a density of 1.0 dwelling units per acre. The *Hillside Area Plan* (referenced below) requires residential development to be consistent with the Hillside Combining District. The Hillside Combining District requires density to be calculated based on a formula that takes into considerations the slope of a project site. When the Hillside Combining District requires a density that is less than 3 to 6 units per acre, a project built at that density is consistent with the General Plan and Hillside Area Plan, which anticipates a density of less than three units per acre when necessary to comply with the Hillside Combining District

This would not constitute a significant environmental impact pursuant to CEQA. In general, CEQA does not treat conflicts with adopted general plan policies as significant impacts unless the policies were adopted for purposes of avoiding or reducing environmental effects. The discussion in this section focuses in particular on policies that can be seen to meet that criterion.

The Land Use Element of the Union City General Plan promulgates goals and policies fostering strategic infill and revitalization, integration of land use and transportation, and mixed-use development. It also establishes policies governing residential development, shopping districts, business parks and job centers, civic and institutional uses, the hillside area, and regional coordination. The project would not conflict with any Land Use Element policies, while it would be supportive of the following policies:

- **Policy LU-1.2: Promote Infill and Enhance Neighborhoods.** The City shall promote infill development and redevelopment of underutilized parcels while maintaining or enhancing the positive qualities of the surrounding neighborhoods.
- **Policy LU-4.6: Appropriate Scale and Massing.** The City shall protect neighborhood character by requiring building scale and massing that is compatible with existing development in single-family residential neighborhoods.
- **Policy LU-5.1: Adequate and Affordable Housing.** The City shall continue to provide opportunities for a variety of housing types at varying densities and affordability levels.
- **Policy LU-5.2: High Quality Residential Development.** The City shall ensure that residential developments are of high architectural quality, provide high-quality amenities, and are designed to minimize exposure to nuisances.

All of the policies in the other General Plan elements were reviewed; this included policies set forth in the Economic Development, Health & Quality of Life, Community Design, Mobility, Safety, Public Facilities & Services, Resource Conservation, and Special Areas elements. No policy conflicts were identified for the proposed project. Although the project would be consistent with or supportive of numerous General Plan policies, it is worth noting that the project would be consistent with the following two policies from the Community Design and Resource Conservation elements, respectively:

- **Policy CD-2.2: Minimize Hillside Viewshed Impacts.** The City shall minimize the viewshed impacts of development at the base of the hillsides.
- **Policy RC-1.6: Require Easements Where Appropriate.** Where appropriate, conservation or open space easements shall be required of new development in order to provide trail connections and /or protect unique natural features or other environmentally significant resources identified during CEQA review, such as steep hillsides, natural stream courses, or unique plant or animal communities or habitats.

Other specific relevant General Plan policies are identified, where appropriate, in other technical sections of this Initial Study, including Noise, Public Services, and Utilities and Service Systems, among others.

### **Hillside Area Plan**

The *Hillside Area Plan* (HAP) was approved as an amendment to the General Plan by Measure B, passed in November 1989. The HAP applies to all land within the City limits east of Mission Boulevard. HAP provisions apply *in addition to*, not *in lieu of*, General Plan policies and regulations. Similar to the General Plan, it is primarily a policy document. Many of the policies mirror General Plan policies already addressed above.

The project site is located within the Hillside Area. However, the project site is located within a portion of the Hillside Area that is designated as “Existing Development” under the Hillside Area Plan. Areas designated as “Existing Development” are generally not subject to the development policies of the Hillside Area Plan, including policies regarding visibility.

### **Zoning Ordinance**

The project site is zoned RS 6000-H (Single-Family Residential, Hillside Combining). One-family dwellings such as the proposed project are a principal permitted use in RS districts. The City’s development standards for residential zoning districts are promulgated in Chapter 18.32 of the Municipal Code. The standards pertinent to the proposed project are identified below.

The RS 6000 district requires a minimum site area of 6,000 square feet, and allows a maximum site coverage of 50 percent. The setback requirements are 20 feet for the front and rear yards, although a rear yard of 15 feet may be allowed if the remaining rear or side yard area has a square footage area of 20 percent or more of the total lot area and a dimension of not less than 15 feet. A minimum side yard setback is required that is equal to 10 percent of the width of the lot, with no more than 10 feet required. With lot sizes ranging from 14,363 square feet to 87,844 square feet, the project complies with the minimum lot size requirement. The maximum site coverage would be 21.4 percent on Lot 1, so all lots would comply with the site coverage limit. The project meets all of the setback requirements on Lot 1 and exceeds the requirements on all other lots.

The RS districts have a height limit of 30 feet, though appurtenances such as spires, chimneys, flagpoles, etc. may be allowed to a maximum height of 40 feet. Two enclosed parking spaces are required for each dwelling unit. An additional uncovered space is required for an accessory dwelling unit, though it can be provided as a tandem unit on the driveway. All of the homes would have a maximum height of 30 feet above finished grade, consistent with the RS 6000-H regulations. All homes would have enclosed three-car garages.

Permanently maintained front yard landscaping is required in all residential districts, pursuant to Municipal Code Section 18.32.115. On corner lots, at least 5 feet of landscaping is also required on the side street. Non-living landscaping may not exceed 25 percent of the required landscaped area unless approval from the City Arborist or City Landscape Architect is obtained.

Chapter 18.32 also establishes design criteria for the City’s residential zoning districts. All new and modified residential development must be articulated on all elevations, with a higher degree of articulation provided on the front elevation.

Based on a review of the project plans, the project appears to conform to all of the zoning regulations described above.

Based on the analysis summarized above, the proposed project would not conflict with the General Plan, zoning regulations, or any other local plans or policies adopted for the purposes of avoiding or mitigating an environmental effect.



	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Conflict with any applicable habitat conservation plan or natural community conservation plan?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: This issue is addressed in Section IV-f.

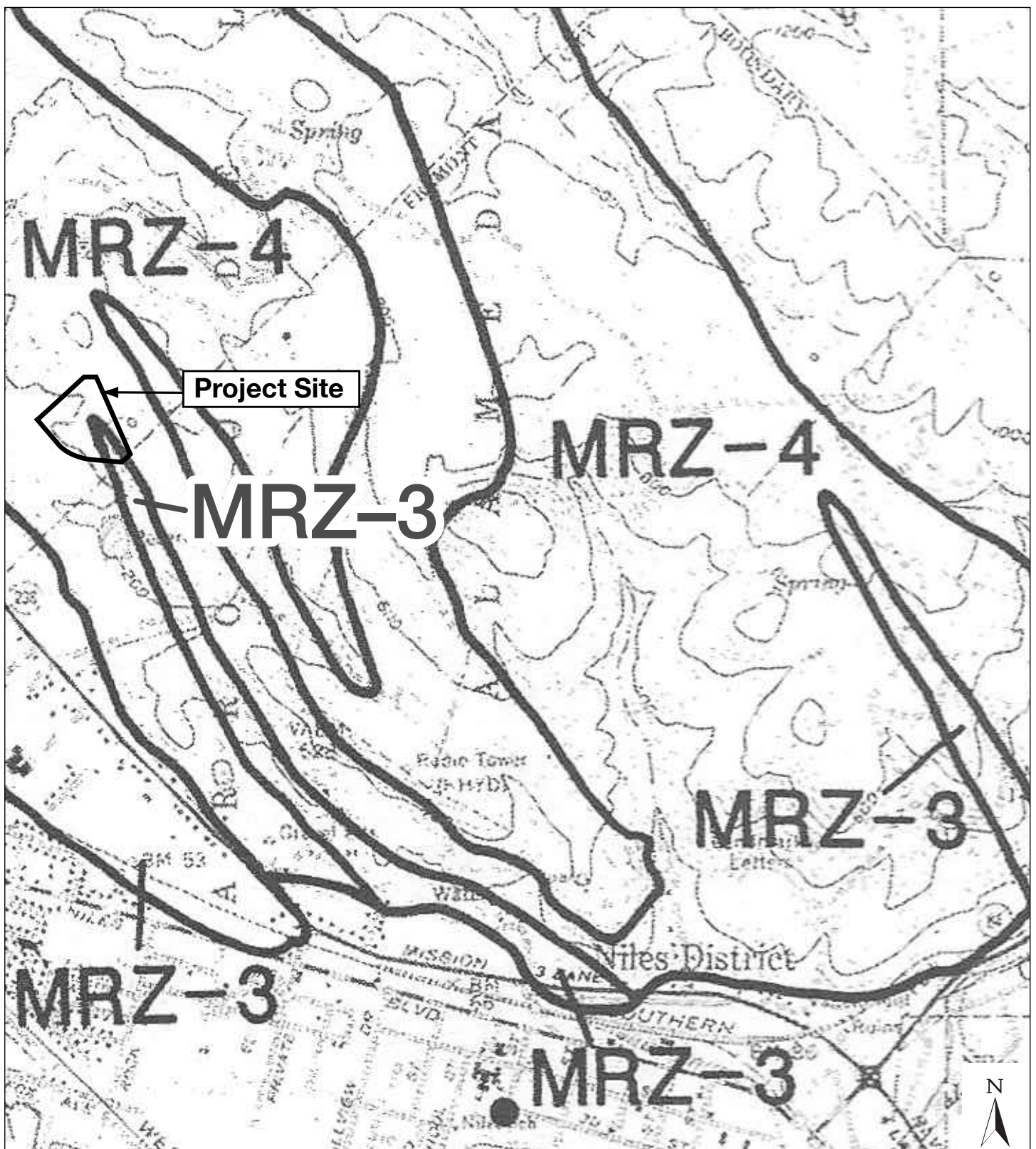
## **XII. MINERAL RESOURCES** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The majority of the project site is classified as Mineral Resource Zone (MRZ) category MRZ-4 by the California Department of Conservation's Division of Mines and Geology (DMG).<sup>60</sup> The MRZ-4 designation is assigned to areas where available information is inadequate to make a clear determination as to whether or not significant mineral deposits exist. A portion of the site is classified as MRZ-3, which indicates an area where mineral deposits exist, but the significance of the deposits cannot be evaluated from available data. Despite these designations, for a number of reasons implementation of the proposed project is not expected to 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. Firstly, as shown on Figure MR-1, the area with the MRZ-3 designation is confined to a narrow band that stretches to the southeast. Given the limited area of deposits, they are less likely to be regionally significant. Secondly, the deposits are immediately adjacent to a developed residential neighborhood where mineral extraction would not be practical. Thirdly, the site has been designated for residential development in the City's General Plan for many years. Finally, the State Geologist would not consider these deposits to be regionally significant. As stated in the DMG report published with the MRZ maps for the Bay Area, mineral lands located within areas that have already been urbanized are not considered viable for extraction, and are deemed incompatible.<sup>61</sup> Therefore, the project would have **no impact** on the availability of mineral resources.

<sup>60</sup> California Department of Conservation, Division of Mines and Geology, Revised Generalized Mineral Land Classification Map, Aggregate Resources Only, South San Francisco Bay Production-Consumption Region, Niles Quadrangle (Plate 3 of 29), 1996.

<sup>61</sup> California Department of Conservation, Division of Mines and Geology, *Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region*, Concepts Used in Identifying Available Aggregate Resources (page 7), 1996.



**Figure MR-1**

**Potential Mineral Deposits in Project Vicinity**

Source: California Division of Mines and Geology, 1996

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** No locally significant mineral resources are designated in the City's General Plan or in the *Hillside Area Plan*; the proposed project would not have an adverse effect on the availability of significant mineral resources.

### **XIII. NOISE** — *Would the project result in:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Similar to most jurisdictions, Union City's regulation of noise is based on commonly-employed noise parameters that are based on the fundamental metric of a decibel (dB), which is a unit of sound energy intensity caused by rapid fluctuation of air pressure as sound waves travel outward from a source. Decibels are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive, with 0 dB corresponding roughly to the threshold of hearing.

A frequency weighting measure, which simulates human perception, is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low and extremely high frequencies, and correlates well with human perceptions of the annoying aspects of noise. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. The A-weighted decibel scale (dBA) is cited in most noise criteria, including Union City's General Plan and Municipal Code standards.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period ( $L_{eq}$ );<sup>62</sup> average day-night 24-hour average sound level ( $L_{dn}$ )<sup>63</sup> with a nighttime increase of 10

<sup>62</sup> The Equivalent Sound Level ( $L_{eq}$ ) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.

<sup>63</sup>  $L_{dn}$  is the day-night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a ten-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

dBa to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL),<sup>64</sup> also a 24-hour average that includes both an evening and a nighttime weighting. Peak noise levels, such as train pass-bys or operation of heavy-duty construction equipment, are often described as the highest instantaneous noise measurement during any measurement period ( $L_{max}$ ).

Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45-60 dBA range, and high above 60 dBA. Outdoor day/night sound levels ( $L_{dn}$ ) vary over 50 dBA, depending on the specific type of land use. The  $L_{dn}$  noise levels average approximately 35 dBA in wilderness areas, 40 to 50 dBA in small towns or wooded residential areas, 75 dBA in major metropolis downtown areas, and 85 dBA near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with respect to public health.

The proposed single-family residential development would be considered a noise-sensitive land use, as defined by Policy S-8.1 of the Safety Element of the *2040 Union City General Plan*. Under Policy S-8.2 and Table S-8.1, the General Plan establishes acceptable limits of noise for this and other land use types. For single-family residential uses, a CNEL up to 60 dBA is a “normally acceptable” noise environment, assuming the buildings involved are of normal, conventional construction, without any special noise insulation. CNEL noise levels between 61 and 70 dBA are considered “conditionally acceptable,” whereby the new development should be undertaken only after a detailed noise analysis that identifies necessary noise insulation features to meet acceptable indoor and outdoor noise levels. Ambient noise levels of 71 to 75 dBA are considered “normally unacceptable,” though development may be allowed with sufficient noise reduction. Noise levels above 75 dBA are unacceptable, and new construction is not allowed.

Union City also regulates noise with its Community Noise Ordinance, promulgated at Municipal Code Chapter 9.40. The ordinance declares it to be the policy of the City that the peace, health, safety and welfare of the citizens of Union City require protection from excessive, unnecessary, and unreasonable noises from any and all sources in the community. The ordinance empowers the Union City Planning Department to investigate complaints of noise disturbance and noise sources that meet the criteria for noise disturbance may be referred to the Planning Commission and be required to implement a noise reduction plan. Municipal Code Section 9.40.041 prohibits the production of sound by any machine, animal, or device on a residential property more than 10 dBA above the local ambient noise level at any point outside of the property.

Operation of the project would generate a negligible amount of noise, primarily by passenger vehicles of the residents and their visitors, delivery trucks, and maintenance/service vehicles arriving to and departing from the single-family residences. Periodic maintenance of landscaping could generate short-term elevated noise levels, such as during operation of a lawn mower or leaf blower. These noise sources are common to all residential development, and are not considered noise disturbances subject to regulation. Therefore, operation of the project would not have the potential to exceed noise limits established in the Union City General Plan or the City’s Community Noise Ordinance. The proposed project would have a ***less-than-significant operational noise impact***.

Chapter 9.40 of the Municipal Code also regulates construction noise. Similar to most jurisdictions in California, Union City does not treat short-term construction noise as a significant impact if it complies with the limits on construction hours established by Municipal Code Section 9.40.053. The ordinance limits construction activity to the hours of 8:00 a.m. to 8:00 p.m. daily except Saturday, when the hours are limited to between 9:00 a.m. and 8:00 p.m. On Sundays and holidays the hours are limited to between 10:00 a.m. and 6:00 p.m. In addition, at least one of the following limitations must be met: 1)

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<sup>64</sup> CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10-decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

no individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet, or 2) the noise level at any point outside the property plane of the project shall not exceed 86 dBA.

The specific limitations on noise levels included in Chapter 9.40 represent a more rigorous approach to construction noise control than is exercised by most Bay Area jurisdictions, and compliance is therefore more difficult to achieve. Many types of heavy-duty construction equipment emit maximum sound levels in excess of 83 dBA at a distance of 25 feet. The majority of noise emitted from such equipment originates from their internal combustion engines—typically diesel-fueled—and is emitted during the air intake and exhaust cycles. Although details about the equipment that would be employed during construction of the proposed project were not available during preparation of this Initial Study, typical construction equipment that is likely to be utilized could include rubber-tired dozers, tractors, loaders, backhoes, graders, pneumatic tools, flat-bed trucks, cement and mortar mixers, pavers, rollers, and air compressors. Based on data provided by the Federal Highway Administration, this equipment would emit noise levels of 74 to 85 dBA  $L_{max}$  at a distance of 50 feet.<sup>65</sup>

Since noise from point sources attenuates at a rate of 6 dBA over hard surfaces and level ground with no obstructions, it can be inferred that at a distance of 25 feet, noise levels from equipment used during project construction would emit noise levels of 80 to 91 dBA, well in excess of the limit established in Municipal Code Chapter 9.40. Given the large hillside on and adjacent to the northeastern side of the site, construction noise could be expected to reflect off the hillside and bounce both skyward and toward the residential homes bordering the site to the northwest. Some of the immediately adjacent homes are extremely close to the property line of the project site, in one case by approximately 10 feet. Since the construction equipment would be operated at or very close to the property line, some of the construction activities would also exceed the 86-dBA limit at the property line. Construction activities would be required to occur only during the hours stipulated in Municipal Code Section 9.40.053, and during the weekday hours, a majority of adjacent residents would likely be away at work, but residents at home during these times would experience disturbing levels of construction equipment noise. Larger numbers of residents would likely be disturbed during the allowed weekend and holiday hours.

Since construction-generated noise would exceed the noise limits stipulated in Municipal Code Section 9.40.053, which was adopted for purposes of avoiding or reducing an environmental impact, this would be a **potentially significant impact**. However, this impact was previously identified in the 2040 General Plan EIR, which concluded that noise from individual construction projects carried out under the 2040 General Plan would temporarily increase ambient noise levels at 25 feet and at adjacent property lines in excess of noise limits established in the Municipal Code. Because compliance with General Plan policies limiting construction hours (Policy S-8.8) and requiring additional construction noise control measures (Policy S-8.9) would not necessarily reduce construction noise to acceptable levels, this was determined to be a significant and unavoidable impact. The EIR also identified Mitigation Measure N-1 to reduce construction noise to the extent feasible. Since the proposed project is consistent with the General Plan, the noise impact from construction of the project has already been addressed, no further analysis of this impact or new mitigation is required, as set forth in Section 15152(a)(d) of the *CEQA Guidelines*. However, Mitigation Measure N-1 from the General Plan EIR would apply to the project. In addition, implementation of Mitigation Measure NOI-1 is recommended to further reduce the construction noise impact on neighboring residents. Therefore, the following mitigation measures would apply to the project:

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<sup>65</sup> U.S. Department of Transportation, Federal Highway Administration, *Construction Noise Handbook*, Roadway Construction Noise Model (RCNM) Inventory, Table 9.1: RCNM Default Noise Emission Reference Levels and Usage Factors, August 2006.

**Mitigation Measure NOI-1:** All construction activity involving the operation of heavy construction equipment shall be limited to the hours of 8:30 a.m. to 6:00 p.m. weekdays, with no such activity allowed on weekends or holidays.

**Mitigation Measure N-1:** **Construction Noise Reduction (from General Plan EIR).** For projects involving impact pile-drivers that are located within 400 feet of noise-sensitive receptors, projects involving sonic pile-drivers that are located within 200 feet of construction, and projects without pile-driving that are located within 175 feet from noise-sensitive receptors, the following mitigation would be required:

- **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receptors.
- **Electrically-Powered Tools and Facilities.** Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.
- **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.
- **Additional Noise Attenuation Techniques.** During the clearing, earth moving, grading, and foundation/conditioning phases of construction, temporary sound barriers shall be installed and maintained between the construction site and the sensitive receptors. Temporary sound barriers shall consist of sound blankets affixed to construction fencing or temporary solid walls along all sides of the construction site boundary facing potentially sensitive receptors.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Generation of excessive groundborne vibration or groundborne noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** While vibration generated by construction activity can cause annoyance to nearby receptors, operation of typical construction equipment that would be employed during development of the project is not associated with excessive levels of groundborne vibration or noise. Any vibration generated during project construction would be minimal, intermittent, and would occur only during the short-term grading period or other construction phases involving operation of heavy equipment. Furthermore, groundborne vibration falls off quickly with distance, and at a distance of 25 feet from the equipment, vibration caused by bulldozers and excavators has no potential to cause structural or non-structural damage to buildings. For example, operation of a large bulldozer produces a vibration



level at 25 feet of 0.089 inches per second (in/sec) of peak particle velocity (PPV).<sup>66</sup> In comparison, a recommended exposure threshold for more vulnerable older and historic buildings is 0.5 in/sec PPV.<sup>67</sup> All of the single-family homes bordering the site are of modern construction, and would not be vulnerable to the minor vibration that would occur during site grading. Temporary construction-related vibration could be noticeable to some people, but occupants of the nearby residences would not experience excessive groundborne vibration or groundborne noise during project construction activities. Following completion of construction, there would be no operational generation of vibration. This would be a **less-than-significant** impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** The nearest airport or airstrip to the project site—Hayward Executive Airport—is located approximately 8 miles to the northwest. There is no potential for operations at this airport to expose future project residents to excessive aircraft noise. There would be **no impact** from airport noise.

#### **XIV. POPULATION AND HOUSING** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The proposed project would create six new single-family residences, with the potential to draw new residents to Union City. Based on the 2010 U.S. Census, Union City has an average household size of 3.38 persons.<sup>68</sup> Thus, the proposed project could potentially increase the City's population by approximately 20 people. This would not represent substantial population growth.

<sup>66</sup> Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment Manual*, Table 7-4: Vibration Source Levels for Construction Equipment, FTA Report No. 0123, September 2018.

<sup>67</sup> California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, Table 14: Dowding Building Structure Vibration Criteria, September 2013.

<sup>68</sup> United States Census Bureau, American FactFinder, Table DP-1: Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data, accessed June 6, 2019 at: [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_AIAN\\_AIANDP1&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_AIAN_AIANDP1&prodType=table).

Furthermore, the site has been designated for residential development for many years, and the potential population from development of the site has been factored into long-range planning both by the City of Union City and by the Association of Bay Area Governments (ABAG). Implementation of the project would have a ***less-than-significant impact*** on population growth.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: No existing housing would be displaced as a result of the project.

**XV. PUBLIC SERVICES** - *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>a) Fire protection?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Fire protection services in Union City are provided by the Alameda County Fire Department (ACFD), which also provides emergency medical response. The Fire Department has 30 fire stations distributed throughout its service area of approximately 508 square miles, four of which are located within Union City. The Department has over 509 authorized personnel and 50 Reserve Firefighters.<sup>69</sup> The fire station nearest to the project site is Station No. 33, located at 33942 7<sup>th</sup> Street, about 1 mile west of the site.

With a service population of about 394,000, the ACFD received 41,683 calls for service in fiscal year 2017-2018, 5,350 of which were within Union City. Of these Union City calls, 158 were structure fires and other fires, and 3,947 were for rescue or emergency medical response.<sup>70</sup> Systemwide, the ACFD received approximately one call for service for every 10 persons residing in its service area in fiscal year 2017-2018, including non-emergency calls, false alarms, and cancelled calls.

<sup>69</sup> Alameda County Fire Department, General Information, accessed January 2, 2020 at: <https://www.acgov.org/fire/about/index.htm>.

<sup>70</sup> Alameda County Fire Department, Response and Activity Statistics, 2015-2016 Fiscal Year, accessed January 2, 2020 at: <http://www.acgov.org/fire/about/statistics.htm>.

The Environmental Impact Report (EIR) prepared for the *2040 General Plan* evaluated demand for public services, including fire protection services, from buildout of the City at the maximum density allowed under the proposed General Plan, including this site.

The 2040 General Plan Draft EIR determined that buildout of the *2040 General Plan* could increase the City's population by up to 11,486 new residents.<sup>71</sup> The Draft EIR found that as future buildout occurs under the *2040 General Plan*, the City will evaluate operations and deployment of services to efficiently use resources. Additionally, new development under buildout of the *2040 General Plan* would be required to comply with all applicable federal, State, and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. This includes the current California Fire Code, which contains project-specific requirements such as construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for sprinkler systems and minimum fire flow rates for water mains. The ACFD includes a Fire Prevention Branch that reviews building and facility plans through the City's development review and building permit processes. Fire Prevention personnel also inspect new and remodeled buildings and facilities to ensure that the structures meet State and local fire codes and standards.

The General Plan Draft EIR concluded that new development allowed under the proposed 2040 General Plan would have a less-than-significant impact on fire protection services because it would be required to comply with now-adopted policies requiring the availability of adequate public services. Specifically, the following proposed policies pertain to the provision of fire protection services:

**Policy PF-1.1: Ensure Adequate Facilities and Services.** The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate to support the project unless the applicant can demonstrate that all necessary public facilities (including water service, sewer service, storm drainage, transportation, police and fire protection services) will be installed or adequately financed and maintained (through fees, special taxes, assessments, or other means).

**Policy PF-1.2: On-site and Off-site Infrastructure.** The City shall require all new development and major modifications to existing development to construct necessary onsite and off-site infrastructure to serve the project in accordance with City standards.

**Policy PF-1.3: Development Fair Share.** The City shall require, to the extent legally possible, that new development or major modification to existing development pays the fair share cost of providing new public facilities and services and/or the cost for upgrading existing facilities.

**Policy PF-10.3: Development Fees.** The City shall require new development to build or fund its fair share of fire protection facilities, personnel, operations, and maintenance that, at minimum, maintains the above service standards.

**Policy PF-10.5: Fire Department Review of Development Projects.** The City shall engage fire personnel in the review of proposed development to identify necessary fire prevention and risk reduction measures.

The analysis presented in the 2040 General Plan Draft EIR is applicable to the proposed project. As concluded in the Draft EIR, prior to approval of the project, the City would ensure that fire protection facilities and services are adequate to serve the project. It is not anticipated that the incremental demand for fire protection services that would be generated by the project would require the construction of new or expanded fire protection facilities. Therefore, the proposed project would have a **less-than-significant impact** on fire protection services.

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<sup>71</sup> City of Union City, *2040 Union City General Plan Update Draft Environmental Impact Report*, SCH #2018102057, Section 4.13, Public Services and Recreation, Impact PS-1, page 4.13.9, June 2019.

Information on adequate Fire Department access to the project site is provided in Section XVII-d and information on adequate fire flow and water pressure is provided in Section XIX-a.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Police protection?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Police protection services in Union City are provided by the Union City Police Department (UCPD), which operates out of headquarters located at City Hall (34009 Alvarado-Niles Road). The UCPD also operates from two sub-stations, one located at 32195 Union Landing Boulevard and the other located at 31880 Alvarado Boulevard.

The UCPD currently has a staff of 81 sworn police officers and more than 25 non-sworn personnel, with a staffing ratio of 1.11 sworn officers per 1,000 residents.<sup>72</sup> In 2018, the UCPD handled 1,923 calls for Part I crimes (i.e., homicide, rape, robbery, assault, burglary, larceny/theft, vehicle theft, and arson).<sup>73</sup>

As discussed in the preceding subsection, the City recently evaluated the impacts on public services that would occur from implementation of the 2040 General Plan. Similar to the findings on fire protection services, the 2040 General Plan EIR determined that the additional population in Union City that would result from buildout of the 2040 General Plan would increase the demand for police protection services. It found that the addition of 11,486 residents through the year 2040 would require the City to employ an additional 38 sworn officers in order to meet the minimum police service ratio recommended by the League of California Cities of 1.4 police officers per 1,000 residents. This increased staffing could require construction of a new police station, but it is currently unknown if, when, and where such a facility would be constructed. Identifying potential impacts from such future development would be speculative at this time, but separate environmental review would be performed pursuant to CEQA once an additional police station is needed, a location has been identified, and a development plan has been created. A new police station would not be required to accommodate additional demand from the construction of six new single-family homes.

In addition to the proposed General Plan policies (i.e., policies PF-1.1, PF-1.2, PS-1.3, PF-10.3, and PF-10.5) listed in Section XV-a, above, the 2040 General Plan EIR identified the following policies pertaining to police protection:

**Policy PF-9.1:** Police Staffing. The City shall strive to maintain Police Department staffing levels in line with population growth by using a baseline staffing benchmark based on the average staffing-to-population ratio of cities within Alameda County (sworn officers and civilian support staff).

**Policy PF-9.2:** Police Equipment and Facilities. The Police Department shall provide and maintain equipment, technologies, and facilities to meet modern standards of safety, dependability, and efficiency.

**Policy PF-9.6:** Coordinate Emergency Response Services with Local Agencies. The City should continue to coordinate and maintain mutual aid agreements with emergency response

<sup>72</sup>City of Union City, *2040 Union City General Plan Update Draft Environmental Impact Report*, SCH #2018102057, Section 4.13, Public Services and Recreation, June 2019.

<sup>73</sup>Union City Police Department, Crimes Statistics, Five-Year Comparisons, accessed January 2, 2020 at: <https://www.unioncity.org/DocumentCenter/View/1838/Crime-Stats-2018?bidId=>.

services with Alameda County, other jurisdictions within the county, special districts, service agencies, voluntary organizations, and state and federal agencies.

**Policy PF-9.8:** Provide Periodic Updates on Police Statistics. The City shall continue to provide updates to the City Council and the community regarding statistics such as crime rates, types of crime committed, and police accountability and use of force. Crime data shall also be mapped and made available to the public.

The proposed project would be consistent with policies pertaining to police protection services included in the 2040 General Plan. The required compliance with the General Plan policies identified above would ensure that the proposed project's impact on police protection services would be **less than significant**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation:** Public school services in Union City are provided by the New Haven Unified School District (NHUSD), which also serves part of south Hayward. School-age children living in the proposed homes would attend Guy Emanuele Elementary School (100 Decoto Road), Cesar Chavez Middle School (2801 Hop Ranch Road), and James Logan High School (1800 H Street).<sup>74</sup> Within Union City, the district-wide enrollment during the 2017-2018 school year was 10,899 students, and has been declining in recent years, dropping by 1,670 students between 2011 and 2018.<sup>75</sup>

Pursuant to Senate Bill (SB) 50 (1998), with payment of applicable school impact fees, the State has determined that proposed development projects would have a less-than-significant impact on schools.<sup>76</sup> The current school impact fee in the NHUSD is \$4.60 per square foot for single-family residential development.<sup>77</sup> The project would be required to pay the current fees, which are typically increased incrementally each year. In accordance with SB 50, payment of the fees would ensure that the project would have a **less-than-significant impact** on schools.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** There are 30 parks in Union City, encompassing a land area of approximately 136 acres. Seven Hills Park abuts the project site on its southern border. This small neighborhood park includes a large turf lawn, full outdoor basketball court, children's playground, picnic tables with BBQ grills, and restrooms. While there are several other small parks in the project vicinity, including Windflower Park

<sup>74</sup>New Haven Unified School District, School Attendance Areas, Accessed January 2, 2020 at: [https://www.mynhusd.org/apps/pages/index.jsp?uREC\\_ID=411038&type=d&pREC\\_ID=897282](https://www.mynhusd.org/apps/pages/index.jsp?uREC_ID=411038&type=d&pREC_ID=897282).

<sup>75</sup>City of Union City, *op. cit.*

<sup>76</sup>Senate Bill (SB 50), Leroy F. Greene School Facilities Act of 1998, Statutes 1998, Chapter 407.

<sup>77</sup>Kelly Muñoz, District Accountant, New Haven Unified School District, personal communication, January 8, 2020.

(34533 Windflower Lane), Willow Park (120 Blue Spruce Lane), and Park Ridge Park (34773 Chesapeake Drive), larger community parks are slightly further, including Shorty Garcia Park, located at 33940 7<sup>th</sup> Street, about 1 mile west of the project site, and Charles F. Kennedy Park, Union City's largest community park, is located about 1.2 miles to the west, at 1333 Decoto Road.

As discussed in Section XIV, Population and Housing, the proposed project would directly induce population growth in Union City by approximately 20 people. This increased population would generate additional demand for parks, particularly for Seven Hills Park, due to its proximity. The 2040 General Plan Draft EIR concluded that the impact on parks from future development under the 2040 General Plan would be mitigated by compliance with applicable General Plan policies and by the payment of the City's Park In-Lieu Fee, adopted in Chapter 17.30 of the Municipal Code pursuant to Government Code Section 65913.2. The primary General Plan policy pertinent to the proposed project is:

**Policy HQL-2.2: Parkland Dedication for Ownership Housing.** The City shall require new residential subdivisions (i.e., ownership housing) to dedicate parkland at a ratio of 3.0 acres per 1,000 new residents or pay an equivalent in-lieu fee to offset the increase in park needs resulting from new residents. Where on-site parkland is dedicated, it shall be improved by the developer and accessible to the general public. The City may use in-lieu fees to purchase land for new parks or to renovate or expand existing parks and recreation facilities.

Additionally, Policy HQL-2.1 demonstrates the City's commitment to the provision of parks:

**Policy HQL-2.1: Increase Parkland.** The City shall strive to increase the number and/or size of neighborhood and/or community parks.

The proposed project does not include any public parkland; the project applicant would therefore be required to pay the City's Park In-Lieu Fee. The required compliance with General Plan Policy HQL-2.2, entailing payment of the Park In-Lieu Fee, would ensure that the proposed project would have a **less-than-significant impact** on parks.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Other public facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The only other public facilities anticipated to be affected by the proposed project would be library facilities. The Union City Library, which is operated as part of the Alameda County Library, is located at 34007 Alvarado-Niles Road, in the Civic Center complex next to City Hall. With a large collection of books and other media, the library serves the residents of Union City, Fremont, Hayward, and Newark.

As previously discussed, implementation of the proposed project could result in population growth in Union City by approximately 20 persons. These new residents would potentially increase the demand for library services and facilities in Union City. The incremental increase in demand would not have the potential to require the construction of new or expanded library facilities, so the proposed project would have a **less-than-significant impact** on other public facilities. The General Plan EIR also found that the City's efforts in support of State and local library infrastructure bond measures would help reduce impacts on libraries resulting from new development under the General Plan.



## XVI. RECREATION —

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The proposed project's potential impact on parks is discussed in Section XV-d, above.

Other recreational facilities in Union City include:

1. **Mark Green Sports Center**, 31224 Union City Boulevard. This 12,000-square-foot gymnasium is a full fitness center offering adult sports programs, including basketball, volleyball, badminton, table tennis, and family fitness programming. The center also offers health and nutrition classes, personal training, small group specialty exercise programs, and fitness therapy.
2. **Ruggieri Senior Center**, 33997 Alvarado-Niles Road. In addition to exercise, cultural, educational, and recreational programs for seniors, this center offers a variety of martial arts classes and musical instrument instruction to children.
3. **Kennedy Youth Center**, 1333 Decoto Road. This youth center for teens aged 12 to 17 includes a computer lab, game room, art room, teen lounge, and outside lounge.
4. **Holly Community Center**, 31600 Alvarado Boulevard. This center offers a variety of martial arts classes to children, and also hosts a wide range of events including weddings, large banquets, meetings, and conferences.

Similar to parks, the additional population that would be generated by the proposed project would result in an incremental increase in demand for the services and programs provided by these recreational facilities. However, the City has General Plan policies in place that are intended to keep pace with new development in providing adequate recreational and other public facilities in order to ensure that adequate facility and service standards are achieved and maintained. These include the following policies from the Health & Quality of Life Element:

- **Policy HQL-2.2: Parkland Dedication for Ownership Housing.** The City shall require new residential subdivisions (i.e., ownership housing) to dedicate parkland at a ratio of 3.0 acres per 1,000 new residents or pay an equivalent in-lieu fee to offset the increase in park needs resulting from new residents. Where on-site parkland is dedicated, it shall be improved by the developer and accessible to the general public. The City may use in-lieu fees to purchase land for new parks or to renovate or expand existing parks and recreation facilities.
- **Policy HQL-2.4: Acquire New Land for Parks and Recreational Facilities.** The City shall strive to meet growing recreational needs of residents and their neighborhoods through the acquisition of land for the addition of new parks and recreation facilities.
- **Policy HQL-2.7: Parks and Recreation Master Plan.** The City shall comprehensively update the Parks and Recreation Master Plan to take inventory of existing parks and

recreational facilities; evaluate the recreational needs of Union City residents, workers, and visitors; and set priorities for the improvement of existing parks and development of new parks to accommodate the diverse needs of existing and future users.

- **Policy HQL-2.9: School Collaboration to Maximize Access to Recreational Facilities.** The City shall collaborate with the New Haven Unified School District to maximize public access to school recreational facilities and grounds, as appropriate.
- **Policy HQL-3.1: Programs for All.** The City shall provide community programs that are appropriate to a wide variety of ages, interests, and backgrounds which reflect Union City's cultural diversity.
- **Policy HQL-3.8: Assess Programs for Children and Youth.** The City shall continually assess its programs and resources for children and youth and expand as necessary to ensure that their needs are being met.

The preceding list is not an exhaustive list of General Plan policies in support of maintaining the City's recreational facilities and programs, but it demonstrates the City's commitment to this goal. The City's implementation of these policies would ensure that the increase in demand for recreation facilities in Union City would have a ***less-than-significant impact*** on recreation facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project does not include construction of any recreational facilities.

## **XVII. TRANSPORTATION/TRAFFIC** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The additional traffic that would be generated by the construction of six new single-family homes would have a negligible effect on the transportation system. According to the 10<sup>th</sup> Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE), the daily trip generation rate for single-family detached housing is 9.44 daily trips per dwelling unit, with 0.74 trips generated during the AM peak hour and 0.99 trips being generated during the PM peak hour. With less than one trip during the peak hours, there is no potential for implementation of the project to conflict with a plan, ordinance, or policy addressing the circulation system. Project-generated traffic would not result in

increased traffic generation. It is worth noting that the two primary arterials that would serve the project site—Mission Boulevard and Decoto Road—are both currently operating at acceptable levels of service (LOS) as established in the 2040 General Plan, and the addition of project-related traffic would not cause a change in the existing or future LOS on these roadways.<sup>78</sup> The project would have a **less-than-significant impact** on traffic.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Conflict or be inconsistent with CEQA Guidelines Section 15064.3?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Section 15064.3 of the *CEQA Guidelines*, added to the Guidelines on December 28, 2018, establishes *vehicle miles traveled* (VMT) as the most appropriate measure of potential transportation impacts, replacing vehicle delay as the long-established metric for evaluating traffic impacts. Although there was an 18-month grace period following the adoption of this guideline, as of July 1, 2020, lead agencies are required by law to employ a VMT methodology when assessing a project's transportation impacts. The City of Union City has not yet adopted a threshold of significance for VMT and has not identified its preferred methodology for calculating VMT and assessing VMT impacts. Prior to establishing their own methodologies and thresholds of significance for VMT impacts, most lead agencies are relying on guidance published by the Governor's Office of Planning and Research (OPR), which is the agency that develops the *CEQA Guidelines*.<sup>79</sup> OPR spent years developing these VMT guidelines, drawing on input from over 250 stakeholder convenings with cities, counties, and metropolitan planning organizations across the State.

Among other provisions, the OPR guidelines on evaluating transportation impacts provide recommended screening thresholds for small projects. One of the thresholds is for small projects that generate or attract fewer than 110 vehicle trips per day. Based on the ITE trip generation rate cited in the previous subsection, the proposed project would be expected to generate about 57 vehicle trips per day. The guidance from OPR states that projects generating fewer than 110 vehicle trips per day may be presumed to have a less-than-significant transportation impact. This indicates that the small number of residential units that would be developed under the proposed project would generate a low amount of VMT relative to existing traffic, and would not have the potential for significant VMT generation. Therefore, the proposed project would not conflict with Section 15064.3 of the *CEQA Guidelines* and the project would have a **less-than-significant impact** transportation impact.

<sup>78</sup> City of Union City, *2040 Union City General Plan Update Draft Environmental Impact Report*, SCH # 2018102057, Tables 4.14-2 and 4.14-3, June 2019.

<sup>79</sup> State of California, Governor's Office of Planning and Research, *Technical Advisory On Evaluating Transportation Impacts in CEQA*, December 2018.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would require construction of an extension of Florence Street onto the project site. The roadway would be extended approximately 350 feet into the site, terminating in a cul-de-sac. The new street segment would not create new traffic hazards such as sharp curves or dangerous intersections, and no incompatible uses would be introduced by the project. The proposed project would have **no impact** related to traffic hazards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Result in inadequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would connect to the existing street network serving the Seven Hills neighborhood, thereby providing adequate access to emergency vehicles. The only potential constraint to emergency access would be ensuring that the proposed cul-de-sac provides an adequate turning radius for fire trucks. The proposed cul-de-sac would have a turning radius of 48 feet and a diameter of 96 feet. This is consistent with the requirements of the Alameda County Fire Department.<sup>80</sup>

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<sup>80</sup> Alameda County Fire Department, Cul-De-Sac Template, provided by Stan Fernandez, Deputy Fire Marshall, 2010.

**XVIII. TRIBAL CULTURAL RESOURCES** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>				
<i>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Pursuant to Assembly Bill (AB) 52, passed by the California Legislature in September 2014, on behalf of the City, Archeo-Tec archaeologist Elizabeth Tjoa contacted the Native American Heritage Commission (NAHC) on October 1, 2019 regarding the presence of any sacred lands or other tribal cultural resources that could be affected by implementation of the proposed subdivision project. The NAHC reported in a letter dated October 10, 2019 that no sacred lands were identified on or in the vicinity of the project site, but also provided a list of tribal representatives who could have information about the project site. On October 10, 2019, Archeo-Tec mailed letters to the following tribal groups who may be traditionally and culturally affiliated with the geographic area of the proposed project site:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- The Ohlone Indian Tribe
- Costanoan Rumsen Carmel Tribe
- North Valley Yokuts Tribe
- The Confederated Villages of Lisjan

As of the time of publication of this Initial Study, neither Archeo-Tec nor the City had received any responses from the tribal groups who, pursuant to AB 52, had 30 days to respond.

As discussed further in Section V, the possible presence of buried prehistoric cultural materials at the project site, including tribal cultural resources, cannot be ruled out, and any disturbance to such resources, were they to exist, could result in a significant, adverse impact on tribal cultural resources. Implementation of Mitigation Measures CR-1 through CR-3, set forth in Section V, would reduce the potential impact to a ***less-than-significant-with-mitigation*** level:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: Public Resources Code Section 5024.1 establishes the California Register of Historical Resources and defines the criteria for inclusion on the California Register. No historic resources are known or suspected to be present at the project site. However, as discussed in Section V-a, their potential presence cannot be completely ruled out. Were such resources to be present, disturbance of the subsurface during construction could damage or destroy the resource(s), which would be a potentially significant impact on historic resources. Implementation of Mitigation Measures CR-1 through CR-3 (see Section V) would reduce the impact to ***less than significant with mitigation***.

#### **XIX. UTILITIES AND SERVICE SYSTEMS** — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

##### ***Water Treatment Facilities***

As discussed in more detail in Section XIX-b, below, water would be supplied to the project by the Alameda County Water District (ACWD), which provides water to the cities of Fremont, Newark, and Union City. Water supplied to most of Union City is treated at ACWD's Blending Facility, which blends water from the District's production well water from the Mowry and Peralta/Tyson Wellfields with water from San Francisco Regional Water Supplies in order to reduce the hardness of the well water.<sup>81</sup> The Blending Facility utilizes three parallel in-line static mixers, each with a design capacity of 20 mgd.

<sup>81</sup> Alameda County Water District, 2018 *Water Quality Report*, Where Our Water Comes From, [undated].



Although total production of 60 mgd can be achieved, the normal sustainable output of the Blending Facility is 45 mgd.

The ACWD operates three treatment facilities within its service area, with a combined treatment capacity of 86 mgd.<sup>82</sup> With average daily production in Fiscal Year 2017-2018 of 37.0 mgd, the District has more than adequate excess treatment capacity to accommodate the additional water demand generated by the project (discussed below in Section XIX-b) without requiring construction or expansion of water treatment facilities.

It is also noted that there would be adequate water pressure and flow for fire-fighting purposes. An engineering analysis conducted for purposes of determining this calculated the static pressure in the proposed fire hydrant at the eastern edge of the planned street cul-de-sac to be 52 pounds per square inch (psi), with a residual pressure of 37.5 psi, and a flow of 1,195 gallons per minute (gpm).<sup>83</sup> Union City Municipal Code requires fire-fighting sprinklers in all new homes. The fire flow analysis determined that there would be at least 750 gpm of flow at 20 psi residual pressure at each of the homes. This is well below the 1,195 gpm flow calculated at the proposed hydrant, demonstrating that there would be adequate fire flow and pressure. The Deputy Fire Marshall for the Alameda County Fire Department reviewed the fire flow analysis and found it satisfactory.<sup>84</sup>

### **Wastewater Treatment Facilities**

Wastewater generated in Union City is treated at the Alvarado Wastewater Treatment Plant (AWTP), operated by the Union Sanitary District (USD). The treatment plant is located near the western edge of Union City, just west of Union City Boulevard and south of Horner Street. The wastewater treatment plant provides primary and secondary (activated sludge) treatment. The current capacity is 33 mgd and average daily flows in 2018 were approximately 22.99 mgd.<sup>85</sup> There is substantial excess capacity at the treatment plant, and no potential for the incremental increase in wastewater treatment demand that would be generated by the project to exceed existing treatment capacity or require the construction of new or expanded treatment facilities.

### **Stormwater Drainage Facilities**

The City recently conducted environmental review of the proposed 2040 General Plan, which included an assessment of potential impacts to the City's stormwater drainage facilities.<sup>86</sup> The 2040 General Plan Draft EIR concluded that buildout under the proposed General Plan would have a less-than-significant impact on stormwater drainage facilities for the following reasons:

- 1) The majority of future development facilitated by the proposed General Plan would consist of infill development in areas already primarily developed, and would result in minimal conversion of open space and permeable surfaces to impermeable surfaces;
- 2) New development would be required to comply with the City's Low Impact Development (LID) goals and policies that reduce the amount and rate of stormwater discharge; and

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<sup>82</sup> Alameda County Water District, ACWD Fact Sheet, Accessed August 24, 2019 at: <https://www.acwd.org/93/Fact-Sheet>.

<sup>83</sup> Eric Evans, P.E., *Draft Technical Memorandum: Seven Hills Estates Development–Water Main and Fire Hydrant Evaluation*, August 26, 2019.

<sup>84</sup> Ramana Chinnakotla, personal communication with Stan Fernandez, Deputy Fire Marshall, Alameda County Fire Department, December 17, 2019.

<sup>85</sup> Union Sanitary District, Our Mission, Facts, and History, accessed August 23, 2019 at: <https://www.unionsanitary.com/about-us/about-us/mission-facts-history>.

<sup>86</sup> City of Union City, *2040 Union City General Plan Update Draft Environmental Impact Report*, SCH #2018102057, Section 4.16, Utilities and Service Systems, Impact UTL-1, June 2019.

- 3) New development would be required to comply with Provision C.3 of the Municipal Regional Stormwater Permit (MRP) (discussed in detail in Section X-a), which also requires incorporation of LID techniques and facilities and requires most projects in Union City to provide detention or bioretention such that the rate and volume of stormwater discharged from a site does not exceed the pre-development levels.

The proposed project would have lower density than was assumed for the site in the 2040 General Plan Draft EIR. The R3-6 – Residential land use designation assigned to the site in the General Plan allows a density of up to 6 dwelling units per acre, while the project would result in a density of just over 1 dwelling unit per acre. Thus, the project's generation of stormwater has already been accounted for in the impact analysis on the City's stormwater drainage facilities presented in the General Plan EIR. As noted above, the EIR found the impact to be less than significant. Therefore, the proposed project would have a ***less-than-significant impact*** on stormwater drainage facilities.

### ***Electric Power, Natural Gas, and Telecommunications Facilities***

The 2040 General Plan EIR also evaluated the increased demand for electric power, natural gas, and telecommunications facilities that would result from buildout under the proposed General Plan, and found the impact to be less than significant.<sup>87</sup> The analysis determined that new development would be required to comply with existing energy efficiency regulations and would be encouraged to implement additional voluntary energy efficiency measures. Additionally, future development would occur within already developed areas of the City where electric power and natural gas infrastructure is already present. The analysis also cited the following General Plan policy:

**Policy PF-7.3: Coordination on Siting of Utilities.** The City shall coordinate with utility providers in the siting, site layout, and design of gas and electric facilities, including changes to existing facilities, to minimize environmental, aesthetic, electromagnetic, and safety impacts on existing and future residents.

In addition, the following 2040 General Plan policies could apply to the project:

**Policy PF-1.1: Ensure Adequate Facilities and Services.** The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate to support the project unless the applicant can demonstrate that all necessary public facilities (including water service, sewer service, storm drainage, transportation, police and fire protection services) will be installed or adequately financed and maintained (through fees, special taxes, assessments, or other means).

**Policy PF-1.2: On-Site and Off-Site Infrastructure** The City shall require all new development and major modifications to existing development to construct necessary on-site infrastructure to serve the project in accordance with City standards.

**Policy PF-1.3: Development Fair Share.** The City shall require, to the extent legally possible, that new development or major modification to existing development pays the fair share cost of providing new public facilities and services and/or the cost for upgrading existing facilities.

Because the project is consistent with the General Plan, the analysis presented in the 2040 General Plan Draft EIR is applicable to the proposed project. The project's demand for electric power, natural gas, and telecommunications facilities would not exceed demand previously assumed in the EIR, which determined that increased demand for these utilities would not require the construction of new or expanded electric power, natural gas, or telecommunications facilities. Therefore, the proposed project would have a ***less-than-significant impact*** on electric power, natural gas, or telecommunications facilities.

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<sup>87</sup> *Ibid.*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Implementation of the proposed project would temporarily consume water for suppression of dust during site grading activities. Water would also be used during project construction for production of concrete, washing equipment, and for other miscellaneous purposes. Following project construction, domestic water would be consumed by project residents, and water would be used for irrigating the proposed landscaping.

### **Water Supply and Demand**

Water would be provided to the site by the Alameda County Water District (ACWD), which derives its domestic water supply from three major sources: State Water Project (SWP) water from the Sacramento/San Joaquin Delta (29 percent), Hetch Hetchy Reservoir in the Sierras (17 percent), and local supplies (54 percent).<sup>88</sup> Source water for the SWP consists of rainfall and snowmelt runoff from northern and central California. The SWP water is delivered to the service area from Lake Oroville via the Feather River, Sacramento River, and South Bay Aqueduct. Hetch Hetchy water is conveyed from Hetch Hetchy Dam, operated by the San Francisco Public Utilities Commission (SFPUC), via the Hetch–Hetchy Aqueduct. The ACWD also receives SFPUC surface water originating in Alameda and San Mateo counties.

The ACWD's local supplies include fresh groundwater from the Niles Cone Groundwater Basin underlying the District's service area (recharged by runoff from the Alameda Creek watershed), brackish groundwater desalinated at the Newark Desalination Facility and blended with Hetch Hetchy water, and surface water from Del Valle Reservoir, near the City of Livermore.

The ACWD is required by State law to prepare an Urban Water Management Plan (UWMP) to identify existing and projected water supply sources, develop demand projections for its approximately 100-square-mile service area, and identify strategies for ensuring that long-term water supplies are sufficient to meet demand under all future demand conditions, including during single- and multiple-year droughts. The UWMP must be updated every five years. The normal UWMP submittal cycle requires that the plans be prepared and submitted in December of years ending in five and zero.

The District's water supply planning is coordinated with other agencies throughout the San Francisco Bay Area. For example, it has participated with a large group of stakeholders including resource agencies, local governments, and environmental groups in developing a *Bay Area Integrated Regional Water Management Plan* (Bay Area IRWMP), last updated in 2013. The ACWD also participates in regional Alameda Creek watershed planning efforts.

At the time of preparation of the latest UWMP, California was in the fifth year of a prolonged drought. The State had previously passed the Water Conservation Bill of 2009 (SBX7-7), which requires a Statewide 20-percent reduction in urban per capita water use by 2020. It requires that retail urban water suppliers determine baseline water use and set reduction targets according to specified requirements, and requires agricultural water suppliers to prepare plans and implement efficient water

<sup>88</sup> Alameda County Water District, *Urban Water Management Plan 2015–2020*, June 9, 2016.

management practices. In further response to the drought, in July 2014 the State Water Resources Control Board (SWRCB) replaced the Statewide reduction target with agency-specific goals based on each agency's average previous residential consumption. The reduction target assigned to ACWD is 16 percent from its baseline use established during select months of 2013.

Although there are varying reports on the duration of California's last extended drought, according to the National Integrated Drought Information System's (NIDIS) U.S. Drought Monitor, the drought extended from December 27, 2011 until March 5, 2019, a period of more than seven years.<sup>89</sup> After an above-average rainfall season in the winter of 2018/2019, northern and central California has recently been again experiencing moderate drought, with the following conditions (by percentage of the State's land area) reported by NIDIS as of June 30, 2020:<sup>90</sup>

- Abnormally Dry: 58.21%
- Moderate Drought: 46.7%
- Severe Drought: 20.84%
- Extreme Drought: 2.45%

As the previous drought persisted, the Governor issued Executive Order B-29-15 on April 1, 2015 that mandated a Statewide reduction in water use of 25 percent from 2013 levels. ACWD has been able to exceed each of the mandated reductions, lowering district-wide consumption in fiscal year (FY) 2014-2015 to 73 percent of the demand in FY2012-2013.

The currently adopted UWMP reported that the total long-term average annual available water supply was estimated to be 73,500 acre-feet<sup>91</sup> per year (AFY) of combined imported and local water supplies.<sup>92</sup> Factoring in implementation of multi-faceted strategies identified in an Integrated Resources Plan (IRP), water demand in ACWD service area was projected to be 77,200 AFY in 2020, when available supply was projected to be 62,900 AFY, leaving excess capacity of 14,300 AFY. By 2040 excess capacity is still projected, though it would be reduced to 6,200 AFY, with demand of 69,800 AFY being met by a supply of 76,000 AFY.<sup>93</sup>

The District's projections for a sustained drought comparable to the most severe five-year drought on record (1987-1991), based on records dating to 1922, indicate that ACWD will have sufficient supplies to withstand a similar long-term drought through 2020, when supply would balance demand. However, during the multi-year design drought, by 2022 demand could exceed supply by 2,900 AFY.

Although District policy is to sustain a shortage of no more than 10 percent during dry and critically dry conditions, it recognizes that severe conditions, such as an earthquake, could result in interruptions to either imported or local water supplies that could result in significantly greater shortages. In such a case, the District would declare a water shortage emergency and enact its Water Shortage Contingency Plan (WSCP) at the appropriate level to address the shortfall. The WSCP is designed to replace the water supply shortage up to a 50-percent shortage. Strategies in the WSCP include

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<sup>89</sup> National Integrated Drought Information System, U.S. Drought Monitor (USDM), Drought in California, Accessed July 4, 2020 at: <https://www.drought.gov/drought/states/california#:~:text=Drought%20in%20California&text=Since%202000%2C%20the%20longest%20duration,affected%2058.41%25%20of%20California%20land>.

<sup>90</sup> National Integrated Drought Information System, California Drought Early Warning System (DEWS), Drought Conditions, Accessed July 4, 2020 at: <https://www.drought.gov/drought/dews/california>.

<sup>91</sup> An acre-foot is the amount of water necessary to cover 1 acre of land to a depth of 1 foot, and is equivalent to 325,851.43 gallons, or 43,560 cubic feet.

<sup>92</sup> Alameda County Water District, *op. cit.*

<sup>93</sup> *Ibid*, Table 9-2.

drawing on its Semitropic Groundwater Banking System, which currently has over 107,000 AF in storage, and imposing mandatory demand reduction measures, among other strategies. The District would also look to secure additional supplies through purchase of water from a California Department of Water Resources drought bank or similar water purchase/transfer program.

### ***Water-Efficient Landscape Ordinance***

The proposed project would provide 35,533 square feet of new landscaping, which would require water for irrigation.<sup>94</sup> The project would be required to comply with the City's water-efficient landscape requirements promulgated in Chapter 18.112 of the *Union City Municipal Code*, which are based on the State Water Efficient Landscape Ordinance (WELO).<sup>95</sup> The ordinance requires landscaping for projects generally requiring Site Development Review (and all discretionary projects with 2,500 square feet or more of landscaping) to design the landscape with water-efficient hydro-zones containing plants with similar water needs. Turf areas may not exceed 25 percent of the landscaping, and at least 75 percent of the area planted with non-turf plants must be drought-resistant, requiring occasional, little, or no summer water application. Disease- and pest-resistant native plants must be selected based on their adaptability to the climatic, geologic, and topographical conditions of the site.

The proposed landscaping would include a total of 4,420 square feet of turf lawn areas on the six residential lots.<sup>96</sup> This would comprise approximately 12.4 percent of the total landscaping, well within the 25-percent limit. Although there are numerous California-native plants included in the list of proposed plants, there is insufficient information on the landscaping plans that were available for review during preparation of this Initial Study to determine whether or not the proposed landscaping complies with the requirements for drought-resistant plants. However, the WELO report for the project shows 72.8 percent of the total landscaped area would be planted with plants that have a low or very low water demand.<sup>97</sup> Thus, it appears that the proposed landscaping would not fully comply with the City's water-efficient landscape requirements promulgated in Municipal Code Chapter 18.112.

Where irrigation is required, an efficient system tailored to each hydro-zone must be employed that meets specific efficiency requirements based on flow rate, application rate, and design operating pressure for each zone. The system must be designed by a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or "any other person authorized to design an irrigation system." Irrigation for the proposed landscaping may not exceed a Maximum Applied Water Allowance (MAWA) that will be calculated for the project. The project will be required to install automatic irrigation controllers using current reference evapotranspiration data or soil moisture sensors, such that total applied water does not exceed the MAWA. An irrigation audit must be submitted to the City demonstrating compliance and proper functioning of the irrigation system.

### ***Project Water Demand***

Per-capita water demand has been declining this century in the San Francisco Bay Area in response to water conservation efforts in the wake of frequent droughts. For example, water demand within the ACWD declined by 27.7 percent between 2013 and 2016, which were drought years. The District estimated that there would be a permanent 6-percent reduction in demand beyond the end of the drought.<sup>98</sup>

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<sup>94</sup> Kurt Leintz, Designer, *Seven Hills Estates WELO Calculations, Lots 1-6, Florence Street, Union City, CA 94587, APN: 87-0034-002-7*, October 19, 2019, as revised January 15, 2020.

<sup>95</sup> California Code of Regulations, Title 23, Division 2, Chapter 2.7.

<sup>96</sup> *Ibid.*

<sup>97</sup> *Ibid.*

<sup>98</sup> Alameda County Water District, *op. cit.*, Section 2.4: Projected Future Water Demands.

The residential water demand of the project was estimated based on the per-capita demand rate reported by the ACWD for 2015, which was 100 gallons per day (gpd) per capita, with a 10-year average of 136 gpd.<sup>99</sup> For purposes of this analysis, the 10-year average is used. The estimated 20 residents generated by the project (see Section XIV-a) would thus have a water demand of 2,720 gpd, or 992,800 gallons per year.

In addition, the proposed landscaping plan indicates that a total of 35,533 square feet of landscaped areas would require irrigation. Consistent with the requirements of Municipal Code Section 18.112.230, the landscaping would be irrigated in different hydro-zones determined by plant water requirements. Irrigation would occur via a combination of high-efficiency rotor and subsurface drip lines, depending on the hydro-zone. The irrigation would be controlled and timed by an automatic controller, based on evapotranspiration data, including climatic conditions at the site and the soil and plant characteristics applicable to each zone.

In compliance with the State WELO and with Municipal Code Chapter 18.112, a landscape architect retained by the project applicant has prepared a Water Efficient Landscape Worksheet for the proposed landscaping. The worksheet factors in the evapotranspiration rate applicable to the climatic conditions at the site and the soil and plant characteristics applicable to each hydro-zone. Applying these factors, the worksheet determines the project's water budget, based on the estimated total water use (ETWU) and maximum applied water allowance (MAWA). The Water Efficient Landscape Worksheet and accompanying landscape documentation package (including landscape design plans, irrigation design plan, grading plan, water supply information, soil management report, and more) must be reviewed and approved by the City, with a copy provided to the Alameda County Water District.

In order to estimate the project's future water demand for landscape irrigation, the details of plant factors and irrigation of the different hydrozones in the proposed landscaping were plugged into the EPA's interactive water demand tool, which factors in local precipitation and evapotranspiration rates.<sup>100</sup> The results indicate that landscape irrigation would require a total of 27,965 gallons per month during the peak watering month of July, when there is typically no rainfall. This would be an average landscape water demand of about 932 gallons per day. During wet winter months in a normal rainfall year, this demand would be reduced substantially or eliminated altogether because the water needs of the landscaping would be met by natural rainfall.

The project's combined domestic and landscape water use is estimated to be 3,652 gpd. The estimated average water consumption of 3,652 gpd represents a minute fraction of ACWD's average daily water production of 37.0 million gallons per day.<sup>101</sup>

The Environmental Impact Report (EIR) for the City's 2040 General Plan evaluated the impact on water supply that would result from new development under the 2040 General Plan. The EIR concluded that with adherence to General Plan policies and ACWD drought contingency plans, there would be adequate water supplies to support new and existing development during both normal rainfall years and multiple drought years, and therefore, buildout under the General Plan would have a less-than-significant impact on water supplies.

The proposed project is consistent with the land use and density assumed for the site in the 2040 General Plan EIR. The impact of the project on water supply has thus already been disclosed in the

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<sup>99</sup>Alameda County Water District, *op. cit.*, Table 8.1: District Data for Analysis and Compliance with SBX7-7.

<sup>100</sup>U.S. Environmental Protection Agency, WaterSense Water Budget Tool, accessed January 13, 2020 at: <https://www.epa.gov/watersense/water-budget-tool>.

<sup>101</sup>Alameda County Water District, ACWD Fact Sheet, accessed August 23, 2019 at: <http://www.acwd.org/index.aspx?nid=93>.



General Plan EIR. The proposed project would therefore have a ***less-than-significant impact*** on water supplies.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: See Section XIX-a, above.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Solid waste in Union City is collected by Republic Services, which hauls the waste to the Fremont Transfer and Recycling Station, located on Boyce Road between Stevenson Road and Auto Mall Parkway in Fremont. There the waste is sorted to remove hazardous waste, reloaded into large-capacity transfer trucks, and transported to the Altamont Landfill, located adjacent to Interstate 580, east of the City of Livermore. Altamont Landfill is permitted for a total refuse capacity of 124,400,000 cubic yards (approximately 14,880,000 tons), with a daily permitted throughput of 11,150 tons/day.<sup>102</sup> As of December 31, 2014, the landfill had 65,400,000 cubic yards of remaining capacity.

Although no demolition debris would be generated during construction of the project, solid waste in the form of scraps, excess materials, packaging, and other wastes would be generated at the site during project construction. The project would be required to comply with the City's Construction and Demolition Debris (C&DD) Ordinance—which requires the recycling of at least 50 percent of construction and demolition debris generated by a project and 100 percent of all cement, concrete, asphalt concrete, non-contaminated soils, land-clearing debris, and plant debris.

Once project construction is complete and the proposed homes are occupied, the future residents would generate household solid waste on an ongoing basis. Based on disposal rates in Union City compiled by CalRecycle for the years 2013 through 2017, the City has a per-capita solid waste generation rate of 0.56 tons per year.<sup>103</sup> Applying this rate to the estimated 20 new residents that

<sup>102</sup> CalRecycle (formerly California Integrated Waste Management Board), Solid Waste Information System Facility/Site Database, Altamont Landfill & Resource Recovery (01-AA-0009), Accessed August 24, 2019 at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/01-AA-0009/>.

<sup>103</sup> City of Union City, 2040 Union City General Plan Update Draft Environmental Impact Report, SCH #2018102057, Section 4.16, Utilities and Service Systems, Impact UTL-4, June 2019.

would potentially be added to the City's population by the project, the project would generate an estimated 11.2 tons of solid waste per year. This would represent about 0.028 percent of the five-year (2013-2017) average of the City's total waste generation, which was 40,446.8 tons.<sup>104</sup>

The City provides weekly curbside collection of recyclable materials to single-family residential neighborhoods, as well as to multi-family developments and commercial businesses. The collection of recyclable materials in single-family residential neighborhoods is provided by Tri-CED, under contract to the City. Single-stream recycling is provided for paper, cardboard, clean aluminum foil and trays, plastic, glass, and metal food and beverage containers collected in a single cart provided to each household, available in three sizes (40-, 64-, and 96-gallon carts). The collection of these materials helps reduce the amount of solid waste disposed of in landfills, and helps the City meet its goal of diverting 90 percent of solid waste generated in the City from landfill disposal by 2020, as established in the City's Climate Action Plan.<sup>105</sup>

The 2040 General Plan EIR evaluated the impact on solid waste disposal capacity that would result from new development allowed under the General Plan. It also addressed the potential impact due to conflicts with federal, State, and local statutes and regulations pertaining to solid waste. The EIR concluded that these impacts would be less than significant because total waste generated in the City at General Plan buildout would account for less than 0.1 percent of the daily permitted throughput at Altamont Landfill, and the landfill has sufficient capacity to accommodate the increase in waste disposal.<sup>106</sup> Additionally, implementation of adopted General Plan policies would further reduce the magnitude of the City's solid waste generation impact. The EIR cited the following policies from the Public Facilities and Services Element of the 2040 General Plan:

**Goal PF-6:** Maintain and support the provision of an efficient program for the management and reduction of solid waste materials, including reuse, recycling, collection, and disposal, to protect public health and the natural environment, to conserve energy and natural resources, and to extend landfill capacity.

**Policy PF-6.1: Adequate Service.** The City shall strive to ensure that franchise haulers provide convenient, dependable, and competitively priced solid waste, recycling, and organics collections services.

**Policy PF-6.2: Solid Waste Disposal.** The City shall ensure that the franchise haulers dispose of solid waste in an environmentally sound, dependable, and cost-effective manner.

**Policy PF-6.3: Solid Waste Diversion.** The City shall meet or exceed State goals regarding waste diversion from landfills and Alameda County Waste Management Authority requirements for recycling and composting, through enhancement of programs that reduce, reuse, and recycle waste and through ongoing and consistent public outreach and education, monitoring, and enforcement activities.

**Policy PF-6-10: Design New Development to Accommodate Recycling and Waste Collection.** All new development with private roads shall be required to construct interior roadways that can accommodate the weight of recycling trucks and waste hauling trucks.

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<sup>104</sup> City of Union City, *2040 Union City General Plan Update Draft Environmental Impact Report*, SCH #2018102057, Section 4.16, Utilities and Service Systems, Table 4.16-2: Annual Solid Waste Disposal – Union City, June 2019.

<sup>105</sup> City of Union City, *Union City Climate Action Plan*, Waste Reduction Measure WR-1.1, November 2010.

<sup>106</sup> The General Plan EIR appears to significantly overstate the City's percentage of waste disposed at Altamont Landfill. It reports that the City would generate approximately 0.05 tons per day of solid waste at buildout of the General Plan. With the landfill being permitted to receive 11,500 tons per day, the City's 0.05 tons per day would represent 0.00043 percent of the permitted daily capacity, a tiny fraction of the reported 0.1 percent comparison.

Multi-family development shall be designed to provide adequate street space and a clear point of travel to easily service containers in the designated collection area. Multi-family developments with centralized waste, recycling and organics collection areas shall be designed to minimize distances from homes and recycling area.

**Policy PF-6.11: Fair Share Recycling and Solid Waste Disposal Rates.** The City shall strive to have recycling and solid waste collection/processing/disposal rates for residential and commercial uses be based on the fair share cost to provide these services.

**Policy PF-6.12: Maintain Competitive Rates.** The City shall strive to maintain recycling and solid waste collection/processing/disposal rates that are competitive with nearby cities.

Development of the project site with single-family homes was assumed in the General Plan EIR analysis, though a higher density of development was assumed than is currently proposed. Therefore, the impacts of the project on solid waste disposal capacity and compliance with applicable solid waste regulations has previously been evaluated and disclosed. The project would have a ***less-than-significant impact*** on solid waste disposal capacity and compliance with solid waste regulations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: See Section XIX-d, above.

**XX. WILDFIRE** — *If located in or near a State Responsibility Area or lands classified as a Very High Fire Hazard Severity Zone, would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Substantially impair an adopted emergency response plan or emergency evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed in more detail in Section IX-g, the project would not block or impede access to emergency evacuation routes, and the development of six single-family homes would not have the potential to interfere with implementation of the City's disaster management operations plan—the *Comprehensive Emergency Management Plan* (CEMP)—or emergency response procedures adopted by any local service providers.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire of the uncontrolled spread of a wildfire?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** Several factors conducive to the spread of wildfire are present at the project site. The site is situated at the base of hills that stretch for miles to the north and east of the site and rise to elevations over 1,400 feet above mean sea level (msl) approximately 2 miles from the site. Within close proximity to the project site, a ridge rises to more than 590 feet msl approximately 1,700 feet northeast of the site. Since the project would be situated at an elevation of about 220 feet msl, the hillsides rising up from the site provide an opportunity for updrafts that could accelerate the spread of a wildfire. In addition, with a hilly western exposure, the site is subject to prevailing westerly winds that occur throughout most of the year, particularly during the summer/fall fire season.<sup>107</sup> Windy conditions, which frequently occur during fire season, could fan flames and further contribute to the uncontrolled spread of a wildfire.

Despite these factors, the risk of wildfire at the site is not considered high. The California Department of Forestry and Fire Protection (CAL FIRE), which maps areas within the State that are deemed to have a high potential wildfire hazard based on a variety of factors that include terrain, fuel loads, expected fire behavior, and burn probabilities, has not identified the project site or the surrounding lands as being within a Very High Fire Hazard Severity Zone (VHFHSZ).<sup>108</sup>

While the project site and upslope areas are covered with grasses and weeds that become dry and flammable during the summer and fall, there is no forest land in the vicinity of the site. CAL FIRE does not consider grassland to be a fire fuel with a high or very high hazard; it is assigned a moderate fuel rank.<sup>109</sup>

The site lies at the urban interface with the undeveloped hillsides to the north and east. A developed neighborhood of paved (flammable) streets and single-family homes is located immediately to the west and there is additional high-density residential development located about 1,000 feet to the southwest, part of the development that flanks Mission Boulevard. Due to this context, an uncontrolled wildfire is highly unlikely to develop south of the project site. Although wildfires are also not likely to develop on the grasslands to the north or east of the site, in the event a fire did occur on these lands, the downslope and downwind position of the site would discourage the spread of fire onto the site.

Current building codes and standards reduce the risk of burning embers igniting buildings. These codes place standards on roofing construction and attic venting. They also require building siding materials, exterior doors, decking, windows, eaves wall vents, and enclosed overhanging decks to

<sup>107</sup> Weather Spark, Union City Wind Direction, accessed June 6, 2019 at: <https://weatherspark.com/y/575/Average-Weather-in-Union-City-California-United-States-Year-Round>.

<sup>108</sup> California Department of Forestry and Fire Protection (CAL FIRE), Alameda County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE [map], September 3, 2008.

<sup>109</sup> California Department of Forestry and Fire Protection, *Draft Environmental Impact Report for the Draft Jackson Demonstration State Forest Management Plan*, SCH#2004022025, Chapter 8: Hazards and Hazardous Materials, December 2005.

meet fire test standards. Construction of the new homes in accordance with these standards would minimize their susceptibility to fire.

Finally, the site is situated close to urban services, including access roads and water supply. Alameda County Fire Station No. 33 is located about 1 mile west of the site, allowing for a rapid emergency response in the event of fire. Based on all of the foregoing considerations, the project would have a **less-than-significant impact** due to increased risk of wildfire.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** As discussed in Section XX-b, above, the project site is well served by existing roads, water supply, and fire-fighting services. The only new infrastructure that would be required would be the extension of utilities onto the site from the existing infrastructure located within Florence Street. Electric power lines serving the project would be placed underground in accordance with Municipal Code Section 12.24.055 requirements. The new infrastructure that would be developed on the project site would not have the potential to exacerbate fire risk. The potential environmental impacts that would result from the construction of utilities and other site infrastructure—such as potential impacts to air quality, water quality, and noise—are addressed throughout this Initial Study. This would be a **less-than-significant impact**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation:** The potential for flooding is addressed in Section X-g and the potential for landslide is addressed in Section VII-a.iv. As discussed in Section XX-b, above, there is not a significant risk of wildfire at or near the project site, so secondary effects such as post-fire slope instability are highly unlikely. This would be a **less-than-significant impact**.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE —

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: There is no potential for the project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. There is a remote possibility for encountering buried historic/prehistoric cultural resources on the site, but mitigation measures have been identified to minimize potential impacts in the event such resources are encountered during project construction. Mitigation has been identified to prevent this and ensure that this potential impact would remain less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: No significant cumulative impacts were identified for the proposed project.



	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: Mitigation has been identified to reduce potential impacts from the generation of dust during project construction, which could potentially have adverse effects on human receptors. No other potentially significant impacts on human beings were identified.

## REPORT PREPARATION

This Initial Study and Mitigated Negative Declaration was prepared under the direction of Douglas Herring & Associates (DHA), with support from the Union City Economic & Community Development Department.

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## MITIGATION MEASURES

### Air Quality

#### **Mitigation Measure AQ-1:**

The property owner/applicant shall require the construction contractor to reduce the severity of project construction period dust and equipment exhaust impacts by complying with the following control measures:

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

#### **Mitigation Measure AQ-2:**

*BAAQMD Basic and Enhanced Exhaust Emissions Reduction Measures.* The applicant shall implement the following measures during construction to further reduce construction-related exhaust emissions:

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of

Regulations). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
- All construction equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall be equipped with engines that meet or exceed CARB Tier 4 off-road emission standards.<sup>110</sup> Exemptions can be made for specialized equipment where Tier 4 engines are not commercially available within 200 miles of the project site. The construction contract must identify these pieces of equipment, document their unavailability, and ensure that the equipment operate on no less than CARB-approved Tier 3 engines with a CARB Level 3 Verified Diesel Emissions Control Device.<sup>111</sup>

## Biological Resources

### **Mitigation Measure BIO-1:**

Prior to commencement of grading or other site disturbance, a qualified plant biologist shall conduct a rare plant survey during the overlapping blooming period (April through June) for the three special-status plant species identified as having potential to occur on the project site. The survey shall be performed in accordance with guidelines for rare plant surveys published by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 2, of the August 2019 biological resources assessment report prepared for the project by Olberding Environmental, Inc., shall be identified and mapped. If any special-status plant species are found on the site, the biologist shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW to identify appropriate mitigation to protect the species. Any further mitigation recommended by USFWS and/or CDFW shall be implemented prior to the initiation of site grading or other site disturbance. The results of the rare plant survey, as well as any additional mitigation requirements identified by USFWS and/or CDFW, as applicable, and the successful implementation of those requirements, shall be documented by the biologist in a letter report to be submitted to the Union City Planning Division. The City shall not issue a grading permit until these requirements have been satisfied.

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<sup>110</sup> Tier 4 emission standards were phased-in over the period of 2008 through 2015.

<sup>111</sup> Meets the intent to achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent CARB fleet average per Table 8-3 of the BAAQMD's *CEQA Air Quality Guidelines*.

**Mitigation Measure BIO-2:**

If site grading or other project construction activities would take place during the bird nesting season (February through August), pre-construction surveys of the project site and the adjacent large trees shall be conducted by a qualified wildlife biologist to identify any nesting passerine birds or raptors (birds of prey). The surveys shall be conducted within 14 days prior to the commencement of the tree removal or site grading activities. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or adjacent trees, a protective buffer zone shall be established by the biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by the biologist, based on the sensitivity of the birds nesting and site conditions, such as whether the nest is in a line-of-sight of the construction activities. The nest site(s) shall be monitored by the biologist at least weekly during construction to see if the birds are stressed by the construction and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), project construction can proceed without further regard to the nest site(s).

**Mitigation Measure BIO-3:**

**A pre-construction survey of the project site for the potential presence of Alameda whipsnake** shall be conducted by a qualified wildlife biologist no more than 48 hours prior to commencement of ground disturbance or vegetation removal. If any whipsnakes are identified, the biologist shall develop appropriate mitigation to protect the species and compensate for lost Alameda whipsnake habitat. The mitigation shall be determined in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) and implemented to the satisfaction of those agencies. Incidental take permits shall be obtained from these agencies prior to the City issuing a grading permit.

Cultural Resources**Mitigation Measure CUL-1:**

City Staff shall advise the Project Construction Superintendent, Project Inspector, and Building Inspector at a pre-construction conference of the potential for encountering cultural resources during construction and the applicant's responsibilities per CEQA should resources be encountered. This advisory shall also be printed on the Plans and Specification Drawings for this project.

**Mitigation Measure CUL-2:**

Throughout site grading and all other ground-disturbing project construction activities, a qualified archaeological monitor shall be present to observe the construction activities in order to identify any historic or prehistoric cultural resources that could be encountered during the ground-disturbing activities. In the event that any cultural resources are discovered, all ground disturbance within 100 feet of the find shall be halted until the archaeologist can evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the

resource(s). (Construction personnel shall not collect any cultural resources.) Any further mitigation measures recommended by the archaeologist shall be implemented and construction shall not resume in the vicinity of the find until the archaeologist has authorized the resumption of work. The results of any additional archaeological effort required through the implementation of this measure and/or Mitigation Measure CUL-3 shall be presented in a professional-quality report, to be submitted to the Union City Planning Division and the Northwest Information Center at Sonoma State University in Rohnert Park.

**Mitigation Measure CUL-3:** In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the City, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

#### Geology and Soils

**Mitigation Measure GS-1:** Prior to the initiation of site grading, the construction contractor shall erect a silt barrier fence along the site boundary along the northwest side of the site, downslope of proposed lots 1, 2, and 3.

**Mitigation Measure GS-2:** If any paleontological resources—such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions—are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). Any further mitigation measures recommended by the paleontologist shall be implemented and construction shall not resume in the vicinity of the find until the paleontologist has authorized the resumption of work. Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).

#### Noise

**Mitigation Measure NOI-1:** All construction activity involving the operation of heavy construction equipment shall be limited to the hours of 8:30 a.m. to 6:00 p.m. weekdays, with no such activity allowed on weekends or holidays.

**Mitigation Measure N-1:**

**Construction Noise Reduction (from General Plan EIR).** For projects involving impact pile-drivers that are located within 400 feet of noise-sensitive receptors, projects involving sonic pile-drivers that are located within 200 feet of construction, and projects without pile-driving that are located within 175 feet from noise-sensitive receptors, the following mitigation would be required:

- **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receptors.
- **Electrically-Powered Tools and Facilities.** Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.
- **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.
- **Additional Noise Attenuation Techniques.** During the clearing, earth moving, grading, and foundation/conditioning phases of construction, temporary sound barriers shall be installed and maintained between the construction site and the sensitive receptors. Temporary sound barriers shall consist of sound blankets affixed to construction fencing or temporary solid walls along all sides of the construction site boundary facing potentially sensitive receptors.



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