

ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

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Environmental Checklist Form Prepared Pursuant to the California Environmental Quality Act (CEQA)

A. **PROJECT DESCRIPTION**

1. **Project title**:

Castro Valley/ Jamison Way Townhomes Project

 Project location: The 1.89-acre Project site is within the unincorporated community of Castro Valley in Alameda County and includes five adjacent parcels with the addresses of 3528, 3528B, 3530, 3532, 3534, 3544, 3546, 3548, and 3550 Jamison Way. The site lies north of Castro Valley Boulevard and Interstate 580 and west of Redwood Road. The assessor parcel numbers (APNs) for the five lots on the Project site are 084A-0076-020-01, 084A-0076-021-04, 084A-0076-021-06, 084A-0076-022-00, and 084A-0076-023-00.
 Figure 1 shows the location of the site in the region and Figure 2 depicts the Project site in its neighborhood context. Figure 3 shows the five APNs on-site.

3. **Project sponsor's name and address:**

Catalyst Development Partners 18 Crow Canyon Court, Suite 190 San Ramon, California 94583

attn: Todd A. Deutscher, President (925) 579-1100

4. General plan designation:

Residential Mixed Density (RMX): 29 Dwelling Units/Acre (Castro Valley Plan, March 2012)

5. Zoning:

R-S-D-15 (Residential Suburban with "D" Combining District, requiring 1,500 square feet of building site area per dwelling unit) (General Ordinance, Sections 17.12, 17.24)

6. **Description of Project**:

Overall Building Program

The proposed Project involves the demolition of existing structures (including a duplex, seven single-family residences, tennis courts, and a pool), the removal of existing trees and vegetation, and the construction of 27 for-sale, two-story townhomes on the 1.89-acre Project site. The Project site, which is currently composed of five assessor's parcels, would be subdivided into eight building lots and four common lots to accommodate the Project. The residential density of the Project site would be 14.3 units per acre. The townhomes would be arranged into four rows of two buildings in each row along an east-west axis. The rows would be divided by a pedestrian access running northward from Jamison Way through the Project site. The buildings west of the pedestrian access of the site would have four townhomes each except for the front row, which would have a total of six townhomes rather than seven. **Figure 4** shows the site plan for the Project.

The townhomes would be up to 25 feet in height, with two-car garages, and would each have three bedrooms and two-and-a-half baths. Figure 5 and Figure 6 show front-facing elevations for the triplex and four-plex townhome buildings, respectively. Unit facades would be oriented outward to Jamison Way and the rear of the property for the first and last rows, respectively, and inward to the central park area for the second and third rows. Triplexes and four-plexes would come in two design options each (A and B), resulting in a total of four different elevation designs for buildings on the project site. These are labeled in the proposed site plan (Figure 4) as 300A (triplex style A), 300B (triplex- style B), 400A (four-plex style A), and 400B (four-plex style B). As shown in the two proposed floor plans in Figure 7 and Figure 8, units that share only one common wall (16 units total; Floor Plan 1) would have 1,643 square feet of conditioned space, while the remaining units would have 1,670 square feet of conditioned space (Floor Plan 2). The total buildable area for units with Floor Plan 1 would be 2,296 square feet, and total buildable area for units with Floor Plan 2 would be 2,342 square feet. Total conditioned space for the 27 townhomes would be 44,402 square feet and total buildable area (i.e., entire area contained in building envelope, including garages) would be 62,466 square feet. Units would also have private yard areas that vary between 314 square feet and 330 square feet, including porches of 66 to 78 square feet. End-of-row units would have some additional private yard area on their sides.

Along Jamison Way, the townhomes would have a setback of 20 feet from the front property line to the front porches and a 20-foot setback to the building. At the rear of the property they would have a 20-foot setback to the building and a minimum 5-foot setback along the east side of the property. The driveway would have a minimum 5-foot landscaped setback from the western property line that widens as it approaches Jamison Way, where a bio-retention basin with a maximum width of 30 feet would be placed between the property line and the driveway. The townhomes along the main drive aisle would have a minimum 10-foot setback from the driveway. **Figure 9** shows a site plan with setback distances.

Open Space and Landscaping

The property would have approximately 6,175 square feet of common open space (**Figure 9**). A central private park area stretching along the east-west axis between the two middle rows of townhomes would provide approximately 4,175 square feet of usable common open space, and the bio-retention basin and surrounding landscaping located to the west of the driveway would provide an estimated 2,000 square feet of open space. The private park area would include a barbecue and picnic tables at the eastern end and additional seating areas. **Figure 10** depicts preliminary landscaping and facilities proposed for the park area. Each townhome unit would also have approximately 300 to 660 square feet of private yard space for a total of 10,666 square feet of private open space. The Project would also include pedestrian walkways throughout the site, as well as additional landscaping elements along the driveway.

The Project would involve the removal of 82 existing trees representing approximately 24 species onsite and in the adjacent Jamison Way right-of-way. The project site would be planted with approximately 80 trees on-site and an additional seven street trees along Jamison Way. A preliminary landscape site plan that illustrates possible tree placement sites and species to be planted is provided in **Figure 11**.

Table 1 provides a summary of the Project's features.

Table 1 Project Summary

| Site Feature | s | | | | |
|---------------------|-----------------|------------------------------------------------|------------------------------------------------|---------------------------------------------|---------------------------------------|
| Site Area (ac | eres) | | 1.89 (82 | 2,328 square fee | et) |
| Residential I | Density (| units per acre) | 14.3 | | |
| Building Fea | atures | | | | |
| Maximum B | uilding H | Height (feet) | 25 | | |
| Number of T | | | 8 | | |
| Total Reside | ntial Uni | ts | 27 | | |
| Unit Type | · · · | | | ory townhome | |
| Unit Bed x Bath | | | 3 x 2.5 | | |
| Building Ar | ea | | | | |
| | No. of Units | Conditioned Space per unit (square feet) | Total Conditioned Space (square feet) | Buildable Area per unit (square feet) | Total Buildable Area (square feet) |
| Floor Plan 1 | 16 | 1,643 | 26,288 | 2,294 | 36,704 |
| Floor Plan 2 | 11 | 1,670 | 18,370 | 2,342 | 25,762 |
| Total | 27 | | 44,402 | | 62,466 |
| Parking | | | | | |
| Resident Par | king | | | 54 space | es (2-car garage per unit) |
| On-site Gues | st Parking | g (not including a | accessible space | es) 19 space | es |
| Accessible to | o Disable | ed Persons | | 2 spaces | 5 |
| Total On-site | e Parking | 5 | | 75 space | es |
| Offsite, On-S | Street Gu | est Parking | | 8 spaces | 3 |
| Total Parki | ng | | | 83 space | es |
| Designated V | Vehicle V | Vash Area | | 1 space | |
| Open Space | Area (s | quare feet) | | | |
| Private Ope | en Space | | | | |
| Private yards | 5 | | 10,666 (appro | x. 300 to 660 sc | uare feet per unit) |
| Common O | pen Spa | ce | | | |
| Central Park | | | 4,175 | | |
| Bio-retention | n areas | | 2,000 | | |
| Total Comn | non Ope | n Space | 6,175 | | |
| Total Open | Space | | 16,841 | | |

Site Access and Parking

Motor vehicles would access the Project site via a driveway from Jamison Way on the western side of the property, roughly aligned to match the commercial driveway across the street. The driveway would intersect with Jamison Way at its southern terminus and run north along the site's western boundary until it dead ends at the northern property line. Two alleys would branch to the east from the driveway and provide access to individual unit garages. One alley would run between the first and second row of townhomes and another would run between the third and fourth rows. Twenty parallel parking spaces would be available for guests along the main driveway and eight on-street parallel parking spaces would also be available on Jamison Way in front of the property. Two perpendicular parking spaces accessible to disabled persons (one being van accessible) would be located along the main driveway between the second and third row of units. **Figure 4** depicts the proposed driveway and alleys. In addition, the site would provide one designated car wash space.

Utilities and Public Services

Sewage service would be provided by the Castro Valley Sanitary District and water service would be provided by the East Bay Municipal Utility District. Stormwater drainage within the site would be managed by the future homeowners association, while stormwater drainage flowing off-site (or "downstream" from the site) is managed by the Alameda County Flood Control and Water Conservation District. The County also regulates and would periodically inspect the on-site stormwater management system. Gas and electricity would be provided by Pacific Gas and Electric Company (PG&E). Fire protection services would be provided by the Alameda County Fire Department and the Project would be served by the Castro Valley Unified School District. Other utility services (e.g., phone, cable TV, internet, etc.) are provided by AT&T, Comcast and/or other companies.

The Project would include the installation of a new on-site sanitary sewer mainline and could require the replacement of an approximately 1,000-foot segment of an existing six-inch sanitary sewer pipe adjacent to the Project site in the public right-of-way of Jamison Way. These activities are included in the Project scope for the purpose of analyzing the Project's potential environmental impacts including those associated with potential offsite activities.

Drainage

The Project would include a 1,085-square foot primary bio-retention basin for stormwater drainage management, extending approximately 80 feet north from Jamison Way, positioned to the west of the driveway. Drainage management would also include an additional 735 square feet of bio-retention areas to the west of the driveway in the northern half of the site. The basin and bio-retention areas are intended to collect stormwater runoff from the entire site and pre-treat or filter the water before it is released into the County's storm drain line in Jamison Way. The basin and bio-retention areas would be composed of two layers overlain on top of native subgrade material: 1) an approximately 12-inch layer of Class 2 permeable material (or equivalent); 2) an approximately 18-inch layer of soil mix with an infiltration rate of five inches per hour. The top layer would be planted with grasses and other vegetation with water filtration properties. The bottom layer would have an approximately four-inch perforated subdrain pipe. The depth of ponding during a design storm event (as defined in Alameda County C.3 Guidance Document) would be no more than 12 inches. Other ancillary bio-retention cells may be included in the landscape areas throughout the site to meet the requirements outlined in the Alameda County C.3 Stormwater Technical Guidance, which provides guidance for developers to meet Provision C.3 of the Municipal Region Stormwater Permit. Among these C.3 requirements is the need for a dedicated location for car washing that drains to landscaped or bio-retention areas.

Runoff from adjacent properties onto the Project site would either be diverted into the County storm

drain system before it reaches the project site, or collected and treated before it is discharged from the site. Measures to treat stormwater runoff from the adjacent street right-of-way would also be incorporated into the street frontage to the extent required by the Public Works Agency.

Construction

Construction of the Project would occur over approximately 11 months, including three weeks for demolition and soil excavation and 10 months for vertical construction. The phases of construction would include demolition, site preparation, grading, utility installation, surface hardscape improvements, building construction, paving, and architectural coating. Demolition would involve removal of the existing duplex and seven single-family residences and auxiliary facilities (e.g., pavements, pool) on the Project site. Site preparation would involve the removal of all existing vegetation on-site and in the adjacent Jamison Way right-of-way, which includes 82 trees. Eight mature and healthy trees located in private property offsite, but immediately adjacent to the Project site, would be protected during construction activities through implementation of tree protection zones. In addition, trees removed during project construction, including trees in the public right-of-way, would be replaced after building construction is complete at a ratio of at least 1:1 as indicated in Figure 11. Due to soil contamination from prior agricultural activities at the site, grading would include the export of surface soil to a depth of approximately two feet from the entire Project site. Excavation would be up to three to four feet in depth for the bio-retention basin and up to five to six feet for the on-site sewer mainline. In addition to on-site construction activities, the Project could require offsite excavation in the event that a segment of public sanitary sewer pipe in Jamison Way needs to be replaced.

7. Existing and surrounding land uses and setting:

The Project site encompasses 1.89 acres and five lots currently developed with a duplex and seven single-family, detached residential units in an urbanized area of Castro Valley. The project site is relatively level with an approximate elevation of 188 feet above mean sea level (ENGEO Inc. 2016). The addresses at the five lots are 3528, 3528B, 3530, 3532, 3534, 3544, 3546, 3548, and 3550 Jamison Way. Their building square footages on each lot are 2,752, 1,611, 743, 2,796, and 1,871, respectively. The five lots have numerous trees and extensive landscaping, a swimming pool, and driveways. The site is bordered by other residences to the west, north, southwest, and east. To the west along Jamison Way and to the northwest are primarily one and two-story single-family detached residences, while to the east along Jamison Way is a mix of one- to two-story single-family residences and one- to two-story multi-family residences. To the north along Lorena Avenue lie primarily twostory apartment complexes. Across Jamison Way to the south is the Castro Village Shopping Center that takes up the majority of a 24-acre 'super-block' extending eastward to Redwood Road and south to Castro Valley Boulevard. The shopping center has numerous service/ financial businesses, restaurants, retail shops, and medical/dental practices, including a Ross Dress for Less, T.J. Maxx, Mountain Mike's Pizza, Farmers Insurance, Village Barber Shop, Curves, and The Beauty Source, as well as a Safeway, Walgreens Pharmacy, and Starbucks along Castro Valley Boulevard. The Hayward Executive Airport is located approximately 3.4 miles southeast of the site. Figures 12 and 13 show photographs of the Project site and Figure 14 shows photos of the surrounding area.

8. Other public agencies whose approval may be required:

The County of Alameda is the lead agency with responsibility for approving the Project. Approval from other public agencies is not required.

Required Approvals:

• Demolition permit for each structure to be demolished (potentially subject to review by the County Parks Recreation and Historical Commission approval and by Building

Inspection Department)

- Site permit for on-site stormwater system, underground utilities, parking lot lighting, and accessible path of travel
- Vesting Tentative Tract Map, including Site Development Review
- Mitigation Monitoring and Reporting Program for CEQA compliance
- Demolition Permit
- Phase I and Phase II Environmental Site Assessments (with County and potential State oversight)
- Encroachment permit from the Alameda County Flood Control and Water Conservation District for work within District right-of-way for construction, modification, or connection to District-maintained facilities



Figure 1 Regional Location

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Fig 1 Regional Location

Figure 2 Project Location



Imagery provided by Google and its licensors © 2016.



Figure 3 Assessor Parcels on the Project Site

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Figure 4 Proposed Site Plan





Figure 5 Proposed Triplex Elevations





Elevation 'B'

-11-

Figure 6 Proposed Four-plex Front Elevations





Figure 7 Proposed Floor Plan 1



Figure 8 Proposed Floor Plan 2



534 314

328 328 314

314 655 657

314 328

AREA (SF) 4175 2000

6175

TOTAL OPEN SPACE = 16,841 SF NUMBER OF UNITS = 27 OPEN SPACE PER UNIT = 623 SF

Figure 9 Proposed Open Space



Catalyst Development Partners Castro Valley/ Jamison Way Townhomes Project



Figure 10 Proposed Common Open Space Landscaping

Catalyst Development Partners Castro Valley Jamison Way Townhomes Project

Figure 11 Landscape Plan



Figure 12 Site Photos



Entrance to the project site with 3528 Jamison Way (left) and 3548 Jamison Way (right) pictured. View looking north across Jamison Way.



3530 Jamison Way.



3528 Jamison Way.



3528B Jamison Way.

Alameda County Planning Department

Figure 13 Site Photos



Main driveway providing access to 3528 and 3530 Jamison Way.



Internal driveway providing access to 3544 and 3546 Jamison Way.



3548 Jamison Way and edge of 3550 Jamison Way (right).



Pool located in parcel 84A-76-23.

Figure 14 Surrounding Area Photos



Multifamily housing located east of the project site along Jamison Way. View is to the northeast.



Single family housing located west of the project site along Jamison Way. View is to the southwest.



Commercial buildings to the south of the project site across Jamison Way.



View east along Jamison Way to the south of the project site across Jamison Way.

B. 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.

| | Aesthetics | | Agriculture and Forest Resources | X | Air Quality |
|--------------|----------------------------|---|--------------------------------------------------|---|--------------------------------|
| \boxtimes | Biological Resources | | Climate Change and Green- house Gas Emissions | X | Cultural Resources |
| \boxtimes | Geology /Soils | X | Hazards & Hazardous Materials | X | Hydrology and Water Quality |
| | Land Use and Planning | | Mineral Resources | | Noise |
| | Population and Housing | | Public Services | | Recreation |
| | Transportation and Traffic | | Utilities / Service Systems | X | Tribal Cultural Resources |
| \mathbf{X} | Mandatory Findings of | | | | |

Significance

C. LEAD AGENCY DETERMINATION:

On the basis of this 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 DECLARA-TION will be prepared.
- □ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- □ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

D. EVALUATION OF ENVIRONMENTAL EFFECTS:

The Environmental Checklist and discussion that follows is based on sample questions provided in the CEQA Guidelines (Appendix G) which focus on various individual concerns within 17 different broad environmental categories, such as air and water quality, biological resources, climate change, cultural resources, land use, public services, noise and traffic (and arranged in alphabetical order). The Guidelines also provide specific direction and guidance for preparing responses to the Environmental Checklist. The sample questions are meant to be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential environmental impacts that are not listed in the checklist must also be considered. The sample questions are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

Each Checklist question requires a "yes" or "no" reply to indicate if the analysis or assessment (or an available reference document) shows that the project will or will not have a potentially significant environmental impact on the subject aspect of the environment. However, there are three possible types of "no" responses, including: "NO: Less Than Significant with Mitigation", which means that potentially significant impacts would clearly be avoided or reduced to an acceptable level by changes to the project or mitigation measures that the project proponent and the Lead Agency have agreed to; "NO: Less Than Significant Impact", which means that while there may have been concerns about possible impacts that require analysis, the "threshold of significance" is not exceeded and the impact is not significant; and "NO: No Impact", which means that for clearly evident reasons documented by a map, reference document, the nature of the project or the setting, the specific kind of environmental impact addressed by the question is not possible or would be nearly insignificant. The following describes in more detail the four different possible answers to the questions in the Checklist, and the types of discussions required for each response:

a) <u>YES: Potentially Significant Impact</u>. Checked if a discussion of the existing setting (including relevant regulations or policies pertaining to the subject) and project characteristics with regard to the environmental topic demonstrates, based on substantial evidence, supporting information, previously prepared and adopted environmental documents, and specific criteria or thresholds used to assess significance, that the project will have a potentially significant impact of the type addressed by the question.

CEQA requires that if the analysis prompted by the Checklist results in a determination that the project will have one or more potentially significant environmental impacts (and the project proponent does not agree to changes or mitigation measures that would assure the subject impact can be avoided or reduced to less than significant levels, an environmental impact report (EIR) is required. In such instances, the discussion may be abbreviated greatly if the Lead Agency chooses to defer the analysis to preparation of the EIR. However, if the analysis indicates that all such impacts can be avoided or mitigated to less-than-significant levels, a Mitigated Negative Declaration can be prepared and this column will not be used for any question.

- b) <u>NO: Less Than Significant With Mitigation</u>. Checked if the discussion of existing conditions and specific project characteristics, also adequately supported with citations of relevant research or documents, determine that the project clearly will or is likely to have particular physical impacts that will exceed the given threshold or criteria by which significance is determined, but that with the incorporation of clearly defined mitigation measures into the project, that the project applicant or proponent has agreed to, such impacts will be avoided or reduced to less-than-significant levels.
- c) <u>NO: Less Than Significant Impact</u>. Checked if a more detailed discussion of existing conditions and specific project features, also citing relevant information, reports or studies, demonstrates that, while some effects may be discernible with regard to the individual environmental topic of the question, the effect would not exceed a threshold of significance which has been established by the Lead or a

Responsible Agency. The discussion may note that due to the evidence that a given impact would not occur or would be less than significant, no mitigation measures are required.

d) <u>NO: No Impact</u>. Checked if brief statements (one or two sentences) or cited reference materials (maps, reports or studies) clearly show that the type of impact could not be reasonably expected to occur due to the specific characteristics of the project or its location (e.g. the project falls outside the nearest fault rupture zone, or is several hundred feet from a 100-year flood zone, and relevant citations are provided). The referenced sources or information may also show that the impact simply does not apply to projects like the one involved. A response to the question may also be "No Impact" with a brief explanation that the basis of adequately supported project-specific factors or general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a basic screening of the specific project).

The discussions of the replies to the Checklist questions must take account of the whole action involved in the project, including off-site as well as on-site effects, both cumulative and project-level impacts, indirect and direct effects, and construction as well as operational impacts. Except when a "No Impact" reply is indicated, the discussion of each issue must identify:

- a) the significance criteria or threshold, if any, used to evaluate each question; and
- b) the mitigation measure identified, if any, to reduce the impact to less than significance, with sufficient description to briefly explain how they reduce the effect to a less than significant level.

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D) of the Guidelines). In this case, a brief discussion should identify the following:

- a) Earlier Analysis Used. Identify and state where they are available for review.
- b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

| 1. Wo | AESTHETICS ould the project: | YES: Potentially Significant Impact | NO: Less Than Significant with Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Have a substantial adverse effect on a scenic vista? | | | | x |
| b) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | x | |
| c) | Substantially degrade the existing visual character or quality of the site and its surroundings? | | | x | |
| d) | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | x | |

Impacts

1a. Scenic Vistas

The Project site is located in a flat, urbanized area of Castro Valley in Alameda County and scenic vistas are not visible from or through the site. Although the Project site is located approximately 0.6 mile north of Interstate 580, which is eligible for State designation as a scenic highway between Interstate 80 and Interstate 5 in the Central Valley (Caltrans 2016), the site is not substantially visible from the highway. Much of Interstate 580 south of the Project site has walls blocking northward views from the highway, and the BART light rail tracks running through the highway's central divider further blocks northward views for eastbound traffic. Moreover, the Project site is located outside the designated scenic corridor associated with Interstate 580, which Section 17.104.070 of the County General Code applies to the highway's segment from 149th Avenue to Interstate 238. Although the Project site is located 700 feet west of Redwood Road, a County-designated scenic route corridor, Section 17.104.020 of the General Code defines the western side of this scenic corridor as limited to the Redwood Road right-of-way in the vicinity of Jamison Way. Neither the Alameda County General Plan's Scenic Routes Element (amended 1994) nor the Castro Valley General Plan (2012) identifies other scenic corridors in the vicinity of the Project site. Therefore, replacement of the existing seven single-family residences and duplex on the Project site with 27 two-story townhomes would not have a substantial adverse effect on a scenic vista.

NO: NO IMPACT

1b. Scenic Resources

The Project site does not contain rock outcroppings or historic buildings that would be considered scenic resources. However, the Project site and adjacent Jamison Way right-of-way currently contain 82 trees of more than 20 different species which represent a notable scenic quality along Jamison Way. Another eight trees are located on private property immediately adjacent to the Project site boundary and would potentially be impacted by Project construction if not protected (see Arborist Report prepared by HortScience for the Project in May 2016, Appendix B). Of these 90 trees, 16 trees have been identified as being in good condition, 60 in fair condition, and 14 in poor condition. Based on the Arborist Report, establishment of tree protection zones during construction are recommended as a condition of approval to protect trees adjacent to the Project site boundary that have been identified as suitable for preservation in Appendix B. All 82 trees on the Project site and in the adjacent Jamison Way right-of-way would be removed. The applicant would be required to obtain an encroachment permit per County Code Section 12.11.140 prior to removal of the street trees from the Jamison Way right-of-way. However, these trees would be replaced by approximately 80 new trees, as shown in **Figure 11**, Landscape Plan. Furthermore, most of the existing trees are *internal* to the Project site and not visible from Jamison Way or the nearest highway. The closest highway is Interstate (I) 580, which is located approximately 0.6 mile south of the Project site

and is not designated as a state scenic highway by the California Department of Transportation (Caltrans) or the Alameda County General Plan Scenic Route Element (Caltrans 2016, Alameda County 1994). Because the Project would replace most, if not all, of the existing trees that would be removed, impacts to scenic resources would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

1c. Visual Quality

The Project site is currently developed with seven single-family residences, a duplex, two parallel paved driveways, and a swimming pool, as shown in the site photos in **Figure 12** and **Figure 13**. A diverse set of 82 established trees also exists on-site and in the adjacent Jamison Way right-of-way. The Project would replace existing structures and vegetation with a residential complex featuring 27 two-story townhouses, a common park area with picnic tables and a barbecue, pedestrian walkways, a driveway, alleys, and a bio-retention basin. The townhome units would be compatible in height and appearance with the surrounding neighborhood, which has one- and two-story single-family homes to the west of the Project site, one- and two-story single-family and multi-family homes to the east, and primarily two-story apartment complexes to the north. As envisioned in the conceptual renderings of unit facades (**Figures 5** and **6**), units would be painted in neutral tones, such as greys, browns, and shades of off-white (**Figures 5** and **6**). This would blend with the palette of the surrounding residential structures, which are painted in earth tones, such as browns, pale blues, greys, and beige. The site would be extensively landscaped and include about 80 new trees to replace the existing trees on the site, which would be removed during Project construction. This would maintain the highly vegetated character of the site.

As discussed in Section 10, *Land Use and Planning*, the Project would have a density of approximately 14.3 units per acre, which is consistent with the site's zoning standards. The Project would also comply with adopted design guidelines for residential projects in the unincorporated communities of West Alameda County, including aesthetic considerations such as avoiding boxy forms and large unrelieved surfaces, respecting adjacent buildings in terms of building height and scale, articulating surfaces on private frontages, avoiding the use of different architectural styles, and providing sufficient setbacks to provide adequate light, air, and privacy (Alameda County 2016). Therefore, although the Project would alter the existing visual character of the site, it would do so in a manner consistent with applicable development policies and aesthetic guidelines, and generally consistent with the scale and character of surrounding development. Impacts to the aesthetic quality of the site would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

1d. Light and Glare

The Project site is located in a fully developed residential area in an urban environment with a relatively high level of ambient light. The Castro Village Shopping Center across Jamison Way to the south has exterior pole-mounted light fixtures to provide nighttime illumination. The Project would add outdoor light sources typical of residential uses for the safety of on-site residences, vehicle traffic, bicyclists, and pedestrians. Traffic associated with the Project, such as resident trips to and from the site, would generate light from headlamps and glare from auto surfaces and windows. Townhome windows would not be expected to create unusual, adverse glare during the day by reflecting sunlight. However, the Project would be required to comply with Alameda County standard conditions of approval that apply to the placement, shielding, height, and diffusion of light fixtures, which would limit light trespass on adjacent properties. In addition, the Project is subject to setback requirements in the Alameda County Residential Design Standards and Guidelines, which would further reduce light and glare impacts to adjacent properties. Project compliance with County standard conditions of approval would reduce light and glare associated with the Project to levels consistent with surrounding residential uses.

NO: LESS THAN SIGNIFICANT IMPACT

| 2. AGRICULTURE AND FOREST RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environ- mental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | YES: Potentially Significant Impact | NO: Less Than Significant with Mitigation | NO: Less Than Significant Impact | NO: 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? | | | | × |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | x |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | x |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | x |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | | | | x |

Impacts

2a-e. Agriculture and Forest Resources

Castro Valley is a fully urbanized community. There is no State-designated farmland in Castro Valley (California Department of Conservation [DOC] 2014) and no agricultural zones or forest lands on or near the Project site identified in the Castro Valley General Plan (Alameda County 2012). The Project would have no impact upon agricultural or forest resources.

NO: NO IMPACT

| mai | AIR QUALITY here available, the significance criteria established by the applicable air quality hagement or air pollution control district may be relied upon to make the owing determinations. Would the project: | YES: Potentially Significant Impact | NO: Less Than Significant with Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Conflict with or obstruct implementation of the applicable air quality plan? | | | | x |
| b) | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | x | | |
| c) | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | × | | |
| d) | Expose sensitive receptors to substantial pollutant concentrations? | | x | | |
| e) | Create objectionable odors affecting a substantial number of people? | | | x | |

Setting

The Project site is within the San Francisco Bay Area Air Basin (the Basin), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that applicable air quality standards are met and, if they are not met, to develop strategies to meet the standards.

The Basin is in nonattainment for the federal and state standards for ozone, as well as state standards for particulate matter (PM_{10} and $PM_{2.5}$) and the federal standard for 24-hour $PM_{2.5}$ (BAAQMD 2014). Thus, the Basin currently exceeds several state and federal ambient air quality standards and local jurisdictions within the Basin are required to implement strategies to reduce pollutant levels to recognized acceptable standards, avoid or mitigate new development projects which would contribute to air pollution. The health effects associated with criteria pollutants upon which attainment of state and federal air quality standards is measured are described in Table 2.

| Pollutant | Adverse Effects |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ozone | (1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage. |
| Carbon monoxide (CO) | Reduces oxygen delivery leading to: (1) Aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses. |
| Nitrogen dioxide (NO ₂) | (1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration. |
| Sulfur dioxide (SO ₂) | (1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma. |
| Suspended particulate matter (PM ₁₀) | (1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ^a |
| Suspended particulate matter (PM _{2.5}) | (1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ^a |

 Table 2 Health Effects Associated with Criteria Pollutants

Source: U.S. EPA 2017.

^a More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and EPA, Air Quality Criteria for Particulate Matter, October 2004.

The 2010 Clean Air Plan (CAP) is the most recently approved regional air quality management plan, adopted in September 2010 by the BAAQMD. This plan provides an integrated, multi-pollutant strategy to improve air quality, protect public health, and protect the climate. The plan is designed to provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases (GHG) in a single,

integrated plan. The CAP relies on population and employment forecasts from the Association of Bay Area Governments (ABAG) to inform its management strategies. The CAP includes Transportation Control Measures (TCM) that reflect new regional investment, policies, and public input, particularly the Metropolitans Transportation Commission's (MTC) regional transportation plan, *Transportation 2035: Change in Motion*.

Air Emissions Thresholds

In 2010, the BAAQMD adopted thresholds of significance to assist in the review of projects' air quality impacts under CEQA. In response to a legal challenge to these thresholds, the State Superior Court in Alameda County judged in March 2012 that the BAAQMD had failed to comply with CEQA when it adopted them. In August 2013, however, the First District Court of Appeal overturned the trial court and held that the thresholds of significance adopted by the BAAQMD were not subject to CEQA review. The California Supreme Court granted review of the Court of Appeal decision limited to the question whether CEQA encompasses impacts of the environment on the project. On December 17, 2015, the court issued its opinion, concluding that, subject to certain enumerated statutory exceptions, lead agencies are not required to analyze the impact of existing environmental conditions on a project's future users or residents. The result of this litigation is that BAAQMD's thresholds have been upheld, with the exception of thresholds that seek to evaluate the impact of the environment on the project (unless one of the enumerated exceptions applies). The thresholds have never been ruled inadequate or lacking in evidentiary support.

This Initial Study, and the County of Alameda Planning Department as the lead agency, utilizes the BAAQMD's significance thresholds for project operations from the May 2010 CEQA Guidelines to determine air quality impacts of the Project. These thresholds provide more stringent air quality thresholds than the 1999 BAAQMD thresholds, and thus, a more conservative analysis. Therefore, these thresholds are considered reasonable for use in this Initial Study.

Table 3 presents the BAAQMD's May 2010 significance thresholds for construction- and operationalrelated criteria air pollutants and precursor emissions. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. For the purposes of this analysis, the Project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in **Table 3**. In addition, a significant air quality impact would occur if the Project would not incorporate control measures recommended by the BAAQMD to reduce emissions during construction (as listed in Table 8-1 of the BAAQMD CEQA Guidelines).

| Pollutant/ Precursor | Maximum Annual Emissions (tpy) | Average Daily Emissions (lbs/day) |
|----------------------|-----------------------------------|--------------------------------------|
| ROG | 10 | 54 |
| NO _X | 10 | 54 |
| PM ₁₀ | 15 | 82 |
| PM _{2.5} | 10 | 54 |

Table 3 BAAQMD Significance Thresholds

Source: Table 2-1, BAAQMD 2010.

Notes: tpy = tons per year; lbs/day = pounds per day; ROG = reactive organic gases; $NO_X = oxides of nitrogen$; $PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; <math>PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.$

Construction Emissions

Emissions generated by development of the Project would include temporary construction emissions and long-term operational emissions. Construction activities such as the operation of construction vehicles and equipment over unpaved areas, grading, trenching, and disturbance of stockpiled soils have the potential to generate fugitive dust (PM_{10}) through the exposure of soil to wind erosion and dust entrainment. In addition, exhaust emissions associated with heavy construction equipment would potentially degrade air quality.

Operation Emissions

Long-term emissions associated with operational impacts would include emissions from vehicle trips, natural gas and electricity use, landscape maintenance equipment, and consumer products and architectural coating associated with on-site development. Emissions could exceed BAAQMD significance thresholds and could expose nearby sensitive receptors to pollution.

Impacts

3a. Air Quality Management Plan Consistency

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the 2010 Clean Air Plan (CAP) if it would result in either population or employment growth that exceeds growth estimates included in the plan. Such growth would generate emissions not accounted for in the air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the applicable air quality plan.

The Project would provide 27 new residential units that would directly increase the area's population by an estimated net 53 persons. As discussed in Section 13, *Population and Housing*, this would constitute about 2.6% of projected population growth in Castro Valley through 2025. Therefore, the Project would not result in population growth exceeding growth forecasts that underlie the air quality management policies contained in the 2010 CAP. No impact related to conflict or obstruction of the applicable air quality management plan would occur.

NO: NO IMPACT

3b-d. Air Quality Standards, Sensitive Receptors

Emissions Modeling

The Project would generate temporary construction emissions and long-term operational emissions. Emissions associated with the Project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1 (see Appendix A for modeling results). Based on the applicant's proposed construction schedule, demolition and construction activities were modeled to occur over a period of about 11 months with three weeks for demolition, site preparation and grading, and ten months for construction of structures, paving, and application of architectural coatings. It was assumed that demolition, site preparation, and grading would each take one week. Due to soil contamination from prior agricultural activities at the site, it was assumed that grading would include the export of 6,098 cubic yards of contaminated surface soils, which is equivalent to two-feet of soil being removed from the entire Project site; this assumption is consistent with Mitigation Measure HAZ-1, provided in Section 8, Hazards & Hazardous Materials. The contaminated soils would be hauled to a train station in the city of Richmond and transported via rail to a landfill in Utah. The hauling truck trip length was assumed to be 27 miles one-way, which is the approximate distance from the Project site to Richmond. The Project was also assumed to comply with applicable state and local regulations, including BAAQMD Regulation 8, Rule 3, which limits ROGs in architectural coating and BAAQMD required mitigation for construction, which includes watering of exposed areas. The modeling of mobile operational emissions assumes the following

reductions in Project-generated trips identified in the Traffic Impact Study for the Project, prepared by Wood Rodgers in January 2017 (see Appendix F): 1) trips credits for the existing residences on-site to be removed, and 2) a 10-percent transit/bicycle/pedestrian reduction for proximity to the Castro Valley BART Station and shopping centers.

Construction Emissions

Construction would generate temporary criteria pollutant emissions primarily due to the operation of construction equipment and truck trips. Estimated emissions associated with the demolition of the existing residences are included in the demolition phase of the Project. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. As shown in Table 4, construction-related emissions would not exceed the BAAQMD thresholds of 54 pounds per day of ROG, NO_X, and PM_{2.5}, or 82 pounds per day of PM₁₀. However, construction activities would emit a maximum of 85.7 pounds per day of NO_X, which exceeds the BAAQMD significance threshold of 54 pounds per day. The highest daily emission of NO_X would occur during grading, which includes an estimated 381 truck trips to Richmond and back to the Project site for removal of contaminated soil. Air quality impacts due to construction would potentially be significant without mitigation.

| Pollutant | Maximum Daily Emissions | BAAQMD Significance Threshold | Significant Impact? |
|-------------------|----------------------------|----------------------------------|------------------------|
| ROG | 12.3 | 54 | No |
| NO _x | 85.7 | 54 | Yes |
| СО | 19.1 | n/a | No |
| SO _x | <0.2 | n/a | No |
| PM ₁₀ | 7.2 | 82 | No |
| PM _{2.5} | 3.3 | 54 | No |

Table 4 Maximum Daily Construction Emissions (pounds/day)

See Appendix A for CalEEMod worksheets.

Operational Emissions

Long-term emissions associated with Project operation, shown in Table 5, would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products and architectural coating associated with on-site development (area sources). Long-term emissions associated with the existing seven single-family residences and duplex on the Project site were not subtracted from the Project's estimated operational emissions to determine the net increase in operational emissions on the Project site resulting from the Project's net impact on air quality. As shown in Table 5, even without subtracting existing on-site operational missions, Project operational emissions would not exceed BAAQMD thresholds for any criteria pollutant. Consequently, the impact of the Project's operational emissions on air quality would be less than significant.

| Pollutant | Total Emissions | BAAQMD Significance Threshold | Significant Impact? |
|-------------------|-----------------|-------------------------------------|------------------------|
| ROG | 11.9 | 54 | No |
| NO _x | 52.0 | 54 | No |
| СО | 16.8 | n/a | No |
| SO _x | 0.1 | n/a | No |
| PM_{10} | 5.2 | 82 | No |
| PM _{2.5} | 2.6 | 54 | No |

Table 5 Operational Emissions (pounds/day)

See Appendix A for CalEEMod worksheets.

Mitigation Measure

Mitigation Measure AQ-1 would be required to reduce NO_x emissions during construction to below the BAAQMD significance threshold of 54 pounds per day.

AQ-1 Hauling Trip Cap. During the Project's grading phase, no more than 38 hauling trips (round trip) for offsite disposal of excavated soil shall occur per day.

Incorporation of Mitigation Measure AQ-1 would reduce maximum daily NO_x emissions to an estimated 52 pounds or less, which is below the BAAQMD significance threshold of 54 pounds per day, while also decreasing daily emissions of other criteria pollutants. **Table 6** summarizes construction emissions with Mitigation Measure AQ-1 incorporated. The baseline scenario with mitigation incorporated was modeled in CalEEMod by doubling the length of the grading phase from five days to ten days. This would spread the estimated 381 truck trips over 10 days resulting in 38.1 trips per day. Because the Project would not exceed BAAQMD thresholds for any pollutant with required mitigation, the Project would not expose sensitive receptors to substantial pollutant concentrations.

| Pollutant | Maximum Daily Emissions (Mitigated) | BAAQMD Significance Threshold | Significant Impact? |
|-------------------|-------------------------------------------|-------------------------------------|------------------------|
| ROG | 12.3 | 54 | No |
| NO _x | 85.7 | 54 | Yes |
| СО | 19.1 | n/a | No |
| SO _x | <0.2 | n/a | No |
| PM ₁₀ | 7.2 | 82 | No |
| PM _{2.5} | 3.3 | 54 | No |

| Table 6 Maximum Dail | v Construction] | Emissions with | Mitigation 1 | Measure AO | -1 (pounds/day) |
|----------------------|------------------|----------------|--------------|------------|-----------------|
| | | | | | |

See Appendix A for CalEEMod worksheets.

With mitigation incorporated, criteria pollutant emissions during construction and operation would fall below BAAQMD significance thresholds and would not expose sensitive receptors to substantial

pollutant concentrations. Therefore, the Project would have a less than significant individual and cumulative impact to air quality.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

3e. Odors

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. The Project would involve the demolition of existing residences and the development of 27 new residences. Residential uses are not considered to be a land use that would generate objectionable operational odors that would affect a substantial number of people (SCAQMD 1993). Construction activities could generate objectionable odors, particularly from operating diesel machinery, which produces oil and fuel smells. However, odors would be limited to the time that construction equipment is operating and would be temporary. In addition, engine idling time for heavy-duty diesel vehicles is restricted to five minutes by the ARB. Finally, the Project would be subject to BAAQMD Regulation 7, which limits the emission of odorous substances. As a result, impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

| | BIOLOGICAL RESOURCES ould the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Have a substantial adverse effect, either directly or through habitat modifi- cations, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | × | | |
| b) | Have a substantial adverse effect on any riparian, aquatic or wetland habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | × |
| c) | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | x |
| d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | x | |
| e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | x | |
| f) | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | x |
| g) | Result in conversion of oak woodlands that will have a significant effect on the environment? | | | | × |

Setting

The five lots on the Project site contain approximately 90 trees (including overhanging canopy of eight offsite trees on neighboring lots) and extensive landscape plantings (e.g., lawns and ornamental vegetation). The Project site is entirely developed and consists of existing structures including single-family and multi-family residences, a pool, driveways, a tennis court, patios, lawns, and numerous trees. The site is bordered by other residences to the west, north, and east and Jamison Way to the south. A commercial development is on the south side of Jamison Way across from the Project site.

HortScience, Inc. prepared an Arborist Report based on a tree assessment conducted on March 23, 2016. All trees six inches in diameter at breast height or greater were surveyed and mapped. In addition, offsite trees with canopies extending onto the subject parcels were included in the inventory. Ninety trees representing 29 species were inventoried and assessed for condition, including eight trees that are offsite but have overhanging canopy and root crowns extending into the site. The majority of the trees are introduced, non-native trees. However, four coast live oaks (*Quercus agrifolia*) and one boxelder (*Acer negundo*) are present on-site, which are species native to California and Alameda County. The majority of the trees inventoried are on private property (HortScience, Inc. 2016); however, up to nine trees are on the public right-of-way of Jamison Way. The complete Arborist Report is in Appendix B. All of the trees on-site provide potential nesting habitat for birds.

On December 16 and 27, 2016, Rincon biologist Anna Kopitov conducted reconnaissance surveys of the Project site to document site conditions, assess the condition of on-site habitat, and evaluate the potential

for sensitive biological resources to occur on the Project site. Two land-cover types were identified on the site: ruderal and developed. Developed areas are located where existing structures, driveways, and land-scapes characteristic of residential areas occur. Ruderal areas are characterized by a lack of vegetation or dominated by non-native plant species. Plant species observed on the site include a mixture of non-native tree and shrubs planted as ornamentals, as well as weedy herbaceous plants and grasses in unmaintained areas of the landscape. Species observed include blackberry (*Rubus* sp.), ivy (*Hedera* sp.), groundsel (*Senecio vulgaris*), camellia (*Camellia* sp.), citrus (*Citrus* spp.), Italian cypress (*Cupressus sempervirens*), sweetgum (*Liquidambar styraciflua*), plum (*Prunus* sp.), English walnut (*Juglans regia*), and glossy privet (*Ligustrum lucidum*). As previously noted, a few native trees, coast live oak and boxelder, persist on-site. An undeveloped area at the rear of lot 1 (as shown in **Figure 3**), adjacent to the tennis court, is overgrown with ivy, blackberry and non-native grasses and is not regularly maintained.

Among the herbs observed on lots 1 and 2 (see **Figure 3**), a flatsedge (*Cyperus* sp., likely *C. eragrostis* or C. *esculentus*) was observed occasionally at the north portion of the site where landscaping is not currently maintained. Some *Cyperus* spp., including *C. eragrostis* and *C. esculentus*, have adapted to growing in shaded, upland areas. This species is often found in wetland habitats; however, although both are native species, they can also exhibit weedy growth in areas such as orchards, lawns, and fields (DiTomaso and Healy 2007). On the Project site, flatsedge was observed growing in disturbed areas, with upland species, including ivy and annual grasses, as well as in cracks in the surfacing of an existing tennis court, and was not dominant across areas of measurable size.

Because flatsedge can occur in wetlands, the biologist evaluated the site to consider if a wetland resource might be present. Although a formal jurisdictional delineation was not completed, no other wetland indicators, such as hydrology, were observed during the reconnaissance survey. No wetland habitats were observed on the Project site during the site visit. The December 16, 2016, field survey was conducted immediately after a series of rain events with no evident wet areas found on the Project site aside from puddles on the main driveway leading to lot 2.

No special status wildlife species were observed during the survey.

Signs of wildlife, including bird nests, and small mammal trails and scat, likely from raccoon (*Procyon lotor*), were observed during the survey. Bird nests were evident throughout the site in trees and shrubs at various heights. There is ample cover for lower strata nesting bird species such as Bewick's wren (*Thryomanes bewickii*). The following migratory birds were observed on or near the site: Anna's hummingbird (*Calypte anna*), American robin (*Turdus migratorius*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), Bewick's wren, American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), California scrub jay (*Aphelocoma californica*), a woodpecker species, and Brewer's blackbird (*Euphagus cyanocephalus*). A domestic cat was also present on the site.

Literature Review

Rincon biologists reviewed relevant databases and literature for baseline information on biological resources occurring and potentially occurring at the Project site and in the immediate surrounding area. The review included information available in peer-reviewed journals, standard reference materials, and relevant databases containing special status biological resources occurrences. Aerial photographs, topographic maps, soil survey maps, national wetlands inventory and national hydrography dataset were also reviewed for this analysis.

Rincon biologists conducted a review of the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife (CDFW) 2016) for recorded occurrences of special status plant and wildlife taxa in the region prior to conducting a reconnaissance-level field survey. **Figure 15** depicts these occurrences of special status species within a five-mile radius of the Project site. The CNDDB query included records from nine U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles



Figure 15 Occurrences of Special Status Species

Imagery provided by ESRI and its licensors © 2016. Special status species data source: California Natural Diversity Database, December, 2016 Additional suppressed records reported by the CNDDB known to occur or potentially occur within this search radius include: Alameda whipsnake, American peregrine falcon. For more information please contact the Department of Fish and Game. National Hydrography Dataset provided by US Geological Survey, 2016.



- 1 Alameda song sparrow 2 - burrowing owl 3 - California clapper rail 4 - California red-legged frog 5 - Crotch bumble bee 6 - great blue heron 7 - hoary bat 8 - longfin smelt 9 - Lum's micro-blind harvestman 10 - monarch - California overwintering population 11 - pallid bat 12 - salt-marsh harvest mouse 13 - salt-marsh wandering shrew 14 - San Francisco dusky-footed woodrat 15 - western bumble bee 16 - western mastiff bat
- 17 yellow warbler 18 alkali milk-vetch
- 19 big-scale balsamroot
- 20 California seablite
- 21 Congdon's tarplant
- 22 Contra Costa goldfields 23 Diablo helianthella
- 24 fragrant fritillary
- 25 hairless popcornflower
- 26 Jepson's coyote-thistle 27 Loma Prieta hoita
- 28 most beautiful jewelflower
- 29 Santa Cruz tarplant 30 - woodland woollythreads
- 31 Valley Needlegrass Grassland
containing or surrounding the site: Hayward, Oakland East, San Leandro, Redwood Point, Las Trampas Ridge, Newark, Diablo, Dublin, and Niles, California. The CNDDB is based on reported occurrences of special status taxa and does not constitute a comprehensive inventory of biological resources for any given area. Other database search results included the CNPS Online Inventory of Rare and Endangered Plants of California (CNPS, 2016) and USFWS Information for Planning and Conservation (IPaC). Rincon biologists also supplemented these data with experience and knowledge of the region. Rincon compiled these sources into a list of regionally occurring special status plants and animals, and evaluated each species for potential to occur based on habitat conditions and proximity to known occurrences. Rincon also reviewed the National Wetlands Inventory (USFWS 2016) and the National Hydrography Dataset depicts any waters or wetlands on the site, and this was corroborated by the site visit.

The United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS 2016) soil map depicts one soil map unit, Clear Lake clay, 2 to 9 percent slopes, drained. This soil map unit is typically associated with basins and swales of drainageways (USDA NRCS 2016). Clear Lake clay, 2 to 9 percent slopes, drained, is classified a hydric soil on the National Hydric Soils List, because in its natural state, many Clear Lake clay soil map units have hydric indicators, and artificially drained soils are retained on the List (USDA NRCS 2016). However, soils in this area were previously modified to support development. The site's existing land use is developed and the existing soil map unit classified as drained.

Impacts

The impact analysis presented in this section is based on a review of pertinent information of the biological resources within the Project region and data collected during a reconnaissance site visit as described below. This analysis considers proposed full build-out of the existing developed lots, as described in the Project Description.

4a. Special Status Species

Special Status Plants

A review of the CNDDB for known special status species occurrences within a nine-quad search area identified a total of 61 special status plant species (CDFW 2016). During reconnaissance surveys, no special status plant species or potentially suitable habitats were encountered. The Project site is an existing developed area that has been disturbed in its entirety, thereby, no suitable habitat for special status plant species remains and special status plants are not anticipated to occur.

Special Status Wildlife and Nesting Birds

Alameda County is home to several species protected by federal and state agencies; however, wildlife habitat on the Project site is limited in its current condition. A review of the CNDDB results for known special status wildlife species occurrences within seven-quad search area identified 42 special status animals in the vicinity of the Project. Focused surveys for wildlife species were not conducted during the reconnaissance survey. No special status wildlife species were observed during the reconnaissance survey. Based on the developed character of the Project site, with the exception of nesting migratory birds or roosting bats, special status species are not expected on the site. No designated critical habitat is present on the Project site (USFWS 2016).

The Project site contains suitable nesting habitat for a variety of birds that are protected under the California Fish and Game Code (CFGC) and the Migratory Bird Treaty Act (MBTA). Future redevelopment of the site would impact suitable habitat for bird nesting by removing vegetation including numerous trees, shrubs and woody debris; and through general construction activity that has the potential to directly and indirectly impact nesting birds. Direct impacts to nesting birds could include the destruction of active bird nests. Indirect impacts include the abandonment of active nests by adult birds that are disturbed by nearby construction activity and associated noise. In order to avoid potential adverse impacts to nesting birds, implementation of Mitigation Measure B-1 would be required.

Potentially suitable roosting habitat for one special status bat species, pallid bat (*Antrozous pallidus*), was observed on the Project site in the form of large trees and buildings. However, existing buildings are currently occupied and in good repair with limited potential access points for bats to enter crevices, attics and walls, and many of the trees are small and lack ideal structures for potential roosting habitat. The site is surrounded by development for over one mile, and foraging areas nearby are limited, thus potential for occurrence is low.

Pallid bat is a California special status species. This mammal species inhabits open, dry habitats with rocky areas for roosting that protect the species from high temperatures, and has also been documented roosting in large trees and structures. The CNDDB identifies several occurrences within less than five miles of the Project site. Although reconnaissance surveys did not identify this species on-site, due to the presence of potential roosting sites and the proximity of documented populations, it is possible that this species could occur on the Project site.

Proposed development could result in impacts to bats if occupied roosts are destroyed or damaged during demolition of structures or removal of trees. Additionally, general construction activity has the potential to directly impact bats if construction activities cause mortality of individuals. Construction activity could also indirectly impact bats by causing the abandonment of nursery roosts by adult bats that are disturbed by construction activity and associated noise. In order to reduce impacts on bats to a less-than-significant level, implementation of Mitigation Measure B-2 would be required. Impacts to special status bats, occupied roosts, and maternal colonies would be potentially significant.

Mitigation Measures

The following mitigation measures would be required to avoid or reduce the Project's potentially significant impacts to nesting birds and special status wildlife.

B-1 Nesting Bird Surveys and Avoidance. Initial site disturbance activities, including vegetation removal and structure demolition, shall be prohibited during the general avian nesting season (February 1 – August 30), if feasible. If breeding season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 30 and February 1.

- **B-2** Roosting Bats Impact Avoidance and Minimization. The applicant shall ensure the following actions are undertaken to avoid and minimize potential impacts to roosting bats:
 - Prior to construction activities, a qualified biologist shall conduct a survey of existing structures proposed for demolition and trees proposed for removal or trimming within the Project site to determine if roosting bats are present. The survey shall be conducted during the non-breeding season (November through March) to the maximum extent feasible to allow for passive relocation of non-maternity roosting bats, if needed. The biologist shall have access to all interior attics, as needed. If a colony of bats is found roosting in any structure, further surveys shall be conducted sufficient to determine the species present and the type of roost (day, night, maternity, etc.). If the bats are not part of an active maternity colony, passive exclusion measures shall be implemented. A passive exclusion plan must be submitted and approved by Alameda County, in close coordination with CDFW, prior to implementation. Exclusion measures may include one-way valves that allow bats to exit the structure but are designed so that the bats may not re-enter the structure.
 - Prior to removal of any trees or structures, a survey shall be conducted by a qualified biologist to determine if any structures proposed for removal or trees proposed for removal or trimming harbor maternal bat colonies. If a non-maternal roost is found, the qualified biologist, in close coordination with CDFW shall install one-way valves or other appropriate passive relocation method. Maternal bat colonies may not be disturbed. When the typical maternity season ends, a biologist shall confirm that the young have matured and the maternity colony is no longer active. At that point, passive exclusion measures may be implemented. A passive exclusion plan must be submitted and approved by Alameda County, in close coordination with CDFW, prior to implementation. Exclusion measures may include one-way valves that allow bats to exit the structure but are designed so that the bats may not re-enter the structure. In the event that a maternity colony is present, other measures to avoid impacts to bats may necessary as determined by the County in consultation with CDFW.

Implementation of mitigation measures B-1 and B-2 would ensure protection of nesting birds and bats that may be present on the site during construction activities. These measures would reduce impacts to special status species to a less than significant level.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

4b. Riparian Habitat and Sensitive Natural Communities

Riparian habitat and sensitive natural communities are absent from the Project site. No impact to these resources would occur.

NO: NO IMPACT

4c. Wetlands and Waters

The site does not contain any federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or any Waters of the State that would fall under the jurisdiction of the CDFW or the Regional Water Quality Control Board. Therefore, no impact to these resource types would occur.

NO: NO IMPACT

4d. Wildlife Corridors

Although the Project site contains a matrix of ornamental vegetation and numerous trees, the property lacks contiguous habitat that would provide critical habitat elements necessary to function as a wildlife corridor. The site is bounded on all sides by existing residential development. The site is not part of, or directly within any known or documented wildlife access or historical migratory route. Because the site is already developed as a residential area, the Project would not significantly alter the existing conditions of the site and as such would not modify any wildlife corridors that may be present in coastal habitat to the west of the Project site.

NO: NO IMPACT

4e. Local Ordinances

The Alameda County Tree Ordinance (no. 0-2004-23) and Chapter 12.11 (Regulation of Trees in County Right-of-Way) of the Alameda County Code of Ordinances finds that the preservation of trees within the County right-of-way enhances the natural scenic beauty, sustains the long term potential increase in property values, protects the surrounding area from soil erosion, moderates the effects of extreme weather conditions and temperatures, improves air quality including increasing the oxygen output of the area which is needed to combat air pollution, creates the identity and quality of the County's businesses and residences, and improves the attractiveness of the County to visitors. Under the Tree Ordinance and Chapter 12.11 of the County Code, any tree removed from the County right-of-way must be authorized by a permit issued by the Director of the Alameda County Public Works Agency (or his or her designee) and typically removals are mitigated through efforts to replace an existing tree or trees with one or more trees of a type consistent with the character of the neighborhood, as outlined in the permit. Similarly, trimming of any trees along the right-of-way that involves removal of branches more than an inch in diameter requires a permit. Permits can be obtained for trimming and removal associated with approved development projects, provided any requirements for replacement planting, encroachment permits, etc. as specified in the ordinance are met.

The Arborist Report estimates that due to the Project's density, it is unlikely that any of the 82 trees onsite and in the adjacent Jamison Way right-of-way, the majority of which are non-native landscape trees, could be preserved. Approximately nine of these 82 trees are in the public right-of-way and would require County permits for removal. The Arborist Report provides recommendations for tree retention, including options to attempt to save on-site trees and recommended care for trees that are at risk to be impacted but could possibly be retained, and also includes information regarding eight trees on neighboring lots that are offsite but with canopy and root crown extending into the site (HortScience, Inc. 2016). These offsite trees on neighboring lots are on private property and are not proposed for removal.

The ordinance already requires that trees on County right-of-way adjacent to any construction must be protected during construction, and if trees along County right-of-way, i.e., along Jamison Way south of the property boundary, must be trimmed or removed for construction of the Project, permits would be

required to comply with the tree ordinance. Adherence to permit requirements would result in no conflict with the tree ordinance.

NO: LESS THAN SIGNIFICANT IMPACT

4f. Conflict with a Conservation Plan

The Project site is not within the boundaries of an approved habitat conservation plan, natural community conservation plan or other approved local, regional, or state habitat conservation plan. Thus, future build out of the Project site would not conflict with any habitat conservation plans, natural community conservation plans or other approved local, regional, or state habitat conservation plans.

NO: NO IMPACT

4g. Oak Woodlands

The site does not contain any oak woodlands. Thus, no impact would occur.

NO: NO IMPACT

| 5. We | 5. CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS Would the project: | | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|-------------------------------------|---------------|
| a) | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | x | |
| b) | Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | | | × | |

Setting

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHG). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat, known as infrared radiation, back towards the atmosphere. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the Industrial Revolution (approximately 250 years ago), however, add to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, and as a result, contribute to an average increase in the Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs include the burning of fossil fuels for energy, livestock production, waste disposal (i.e., methane emissions from landfill waste), deforestation, and agriculture. GHGs produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). It is estimated that since 1750, the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased by over 36%, 148%, and 18%, respectively, primarily due to human activity (U.S. EPA 2009). Emissions of GHGs may affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way in which the Earth absorbs gases from the atmosphere. Potential impacts of global climate change in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CEC 2009).

California's major initiative for reducing GHG emissions is outlined in Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires the California Air Resources Board (ARB) to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions. AB 32 codified a short-term statewide GHG reduction goal to set the State on a trajectory to attain the long-term statewide goal of 80% below 1990 levels by 2050. On September 8, 2016, California codified a mid-term statewide goal of 40% below 1990 levels by 2030 under Senate Bill (SB) 32.

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines

for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

In 2007 Alameda County signed the Cool Counties Climate Stabilization Declaration (R-2007-336), which committed the County to work towards achieving an 80% reduction in GHG emissions by 2050. In, 2014, Alameda County adopted its Community Climate Action Plan (CCAP). The CCAP includes results of the County's GHG emissions inventory and provides GHG reduction strategies for six climate action areas (transportation, land use, building energy, water use, waste, and green infrastructure) to meet GHG reduction targets consistent with AB 32. According to the CCAP, the unincorporated areas of Alameda emitted 930,039 metric tons of carbon dioxide equivalent emissions (MT CO₂e) per year in 2005. Thus, to meet AB 32 target reductions, the County would need to reduce annual emissions to 15% below 2005 levels by 2020, or to 790,533 MT CO₂e. It is projected that the strategies set forth in the CCAP would slightly exceed this target and achieve a 15.6% reduction relative to 2005 emissions, or 785,070 MT CO₂e (Alameda County 2014).

Significance Thresholds

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds or consistency with a regional GHG reduction plan (such as a Climate Action Plan). GHG emissions in Alameda County can be evaluated using both options as the BAAQMD has adopted quantitative significance thresholds and the County has adopted a Community Climate Action Plan. However, both options were designed to achieve consistency with the statewide AB 32 reduction target and have not been updated to achieve consistency with the recently codified SB 32 statewide reduction target. Therefore, the Project's GHG emissions impacts are evaluated using existing criteria designed for consistency with AB 32 (i.e., BAAQMD thresholds and the County's CCAP) and a project-specific per-person threshold calculated to be consistent with SB 32. These two methods are described in greater detail below.

Thresholds for Consistency with AB 32

The BAAQMD adopted significance thresholds for GHG emissions from new development in June 2010 (Table 7). For land use development projects (residential, commercial, industrial), the threshold is compliance with a qualified GHG Reduction Strategy, or either: 1) annual emissions less than 1,100 MT CO₂e per year, or 2) 4.6 MT CO₂e per service population (residents + employees) per year. For the purpose of this analysis, the BAAQMD threshold of 1,100 MT/year CO₂e is used to analyze the significance of environmental impacts due to project-generated GHG emissions; the second threshold is intended for larger-scale projects to avoid penalizing larger projects that would have efficient, low-GHG emissions relative to their service population. The Project's consistency with applicable CCAP strategies to reduce GHG emissions is also analyzed to determine the significance of GHG Project impacts.

Threshold for Consistency with SB 32

The second quantitative significance threshold used in this report is a per-person emissions target (i.e., GHG emissions per person) for unincorporated Alameda County. The per-person emissions target was calculated specifically for this Project by determining target emissions for Alameda County in 2020 and

dividing County target emissions by the service population applicable to the Project. The 2020 County target emissions stated in the CCAP (790,533 MT CO₂e) is tailored to meet the AB 32 2020 target, which lies on the trajectory to meet the SB 32 2030 target. The year 2020 was used because population projections are not available for 2018the Project's operational year; using a later year provides a more stringent target. Because the Project would involve only residential uses, only the unincorporated County's projected residential population of 150,400 persons in 2020 was used as the service population. Thus, the per-person emissions target consistent with SB 32 for the Project is 5.3 MT CO₂e per year.

| 8 | |
|-----------------------------------------|-------------------------------------------------------------|
| GHG Emission Source Category | Operational Emissions |
| AB 32 (BAAQMD thresholds) | |
| Non-stationary Sources | 1,100 MT CO ₂ e/year |
| | OR |
| | 4.6 MT CO ₂ e/SP/year (residents + employees) |
| Stationary Sources | 10,000 MT/year |
| Plans | 6.6 MT of CO ₂ e/SP/year (residents + employees) |
| SB 32 (Alameda County emissions target) | |
| Project-specific emissions target | 5.3 MT CO ₂ e/ resident/ year |
| | |

Table 7 GHG Significance Thresholds

Notes: SP = *Service Population (employees* + *residents).*

Emissions Modeling

Project construction and operation emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1, as previously described in Section 3, *Air Quality*.

Construction Emissions

Construction of the Project would generate GHG emissions primarily due to the operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the Project site and heavy trucks to export earth materials offsite. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod provides an estimate of emissions associated with the construction period based on parameters such as the duration of construction activity, area of disturbance, and anticipated use of equipment during construction.

The BAAQMD has not established a threshold of significance specifically for construction-related GHG emissions and California Air Pollution Control Officers Association (CAPCOA) does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in their white paper, *CEQA and Climate Change*, "more study is needed to make this assessment or to develop separate thresholds for construction activity (CAPCOA 2008)." However, the San Luis Obispo Air Pollution Control District (SLOAPCD), as well as other districts, has recommended adding amortized construction emissions to annual operational emissions to determine total annual emissions and comparing the combined total to significance thresholds for annual operational emissions. The SLOAPCD recommends amortizing construction-related emissions over a 25-year period for commercial projects and a 50-year period for residential projects. This approach is used to analyze the significance of the Project's combined construction and operational GHG emissions.

Operational Emissions

CalEEMod estimates operational emissions of the following GHGs: CO₂, N₂O, and CH₄. Operational GHG emissions would be generated primarily by direct and indirect energy use, which relies largely on

the burning of fossil fuels. Emissions from direct energy use include electricity and natural gas use for heating and stoves. The emissions factors for natural gas combustion are based on EPA's AP-42, (Compilation of Air Pollutant Emissions Factors) and the California Climate Action Registry's (CCAR) General Reporting Protocol. Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2016). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's "2006 Refining Estimates of Water-Related Energy Use in California" using the average values for Northern and Southern California. Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates provided by ARB and the U.S. EPA, as well as emission factor values provided by the local air district (CAPCOA 2016).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2016). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

For mobile sources, CO_2 and CH_4 emissions were quantified in CalEEMod. Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using CCAR direct emissions factors for mobile combustion (CCAR 2009); Appendix A provides N₂O calculations. The number of total daily weekday trips associated with the Project was taken from the Project's Transportation Impact Study conducted by Wood Rogers (see Appendix F) and was used to derive total annual mileage in CalEEMod. The modeling of mobile emissions assumes the following reductions in Project-generated trips identified in the Traffic Impact Study: 1) trip credits for the removal of existing residences on-site, and 2) a 10-percent transit/bicycle/pedestrian reduction for proximity to the Castro Valley BART Station and shopping centers. Emission rates for N₂O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the CCAR General Reporting Protocol (2009).

As discussed in Section 3, *Air Quality*, operational emissions were modeled without subtracting emissions from existing residences on-site, which provides a conservative estimate of the Project's net impact on air quality and climate change.

Impacts

6a-b. GHG Emissions, Consistency with GHG Reduction Plans and Policies

Construction Emissions

Construction activities would generate GHG emissions due to associated operation of diesel-powered equipment, truck and vehicle trips, and use of products, such as architectural coatings, that emit GHGs. Based on CalEEMod estimates, the Project would emit approximately 247 MT CO₂e over the construction period (Table 8). Amortized over a 50-year period (the assumed lifetime of the Project), construction emissions would contribute approximately 5 MT CO₂e per year.

| Year | Project Emissions (MT CO ₂ e) |
|-------------------------------|------------------------------------------|
| Total | 247 |
| Total Amortized over 50 Years | 4.9 |

Table 8 Estimated Construction GHG Emissions

See Appendix A for CalEEMod worksheets.

Operational Emissions

Operational GHG emissions would be generated by area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to deliver water, and vehicle trips associated with the Project. Based on CalEEMod estimates, the Project would emit about 318 MT CO₂e per year during operation (Table 9). As this estimate does not subtract out emissions associated with the existing seven single-family homes and duplex currently on the Project site, the net increase in operational emissions due to the Project would be lower. The project site would accommodate approximately 80 new residents, without subtracting existing residents, based on an average household size of 2.96 persons for Alameda County (DOF 2016). Thus, per-person emissions associated with the project would be 4.0 MT CO₂e per year. GHG emissions associated with the Project would not exceed the 1,100 MT CO₂e per year significance threshold for GHG emissions established by the BAAQMD, and would not exceed the annual per-person emission target for the Project.

| Emission Source | Annual Emissions (MT CO ₂ e) |
|---------------------------------------------------------------------------|-----------------------------------------|
| Construction | 4.9 |
| Operational | |
| Area | 0.3 |
| Energy | 85.0 |
| Solid Waste | 6.2 |
| Water | 6.3 |
| Mobile | |
| CO ₂ and CH ₄ | 206.8 |
| N ₂ O | 8.6 |
| Project Total Emissions | 318.1 |
| Per-person Emissions ¹ | 4.0 |
| Thresholds | Threshold Exceeded? |
| BAAQMD project threshold: 1,100 MT CO ₂ e/year | No |
| Per-person significance threshold: 5.3 MT CO ₂ e/resident/year | No |

Table 9 Combined Annual Emissions of Greenhouse Gases

See Appendix A for CalEEMod worksheets.

¹ The Project would accommodate approximately 80 new residents, without subtracting existing residents, based on an average household size of 2.96 persons for Alameda County.

Cools Targets and Policies

Senate Bill 375, signed in August 2008, requires the inclusion of sustainable communities' strategies (SCS) in regional transportation plans (RTP) for the purpose of reducing GHG emissions. In July 2013, the Metropolitan Transportation Commission (MTC) and the ABAG adopted the Plan Bay Area 2013, which is a state-mandated, long-range, integrated transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution in the nine-county San Francisco Bay Area (MTC 2013). The MTC is in the process of updating the plan and the draft Plan Bay Area 2040 is available for review, but has not yet been adopted. As discussed in the setting section above, the Alameda County has an adopted CCAP that includes measures and implementation actions to achieve GHG emission reduction goals. Table 10 analyzes the Project's consistency with the Plan Bay Area 2013 and the Alameda County CCAP. As demonstrated below, the Project would be consistent with the goals, targets, and policies of both plans.

Consistance

| Goals, Targets, and Policies | Consistency |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plan Bay Area | |
| Plan for housing sufficient to house 100% of the Bay Area's future workers and residents from all income levels, without displacing current low-income residents. | Consistent The Project would involve infill development that would result in a net increase of 18 housing units on-site. Thus, the Project would increase available housing for Bay Area workers and residents. |
| Reduce vehicle miles traveled (VMT) per capita by 10%. | Consistent The proximity of the proposed infill development to public transit would reduce VMT. The Bay Area Rapid Transit (BART) Castro Valley Station is located approximately 0.6 miles from the Project site and provides regional rail service, including to San Francisco, Oakland and Berkeley. Additionally, the area in the vicinity of the Project site is served by Alameda/Contra Costa (AC) Transit buses 32, 48, NXC, and NX4. |
| Alameda County CCAP | |
| Energy Action Area | |
| E-10 Require new construction to use building materials containing recycled content | Consistent The Project would be required to comply with this requirement for use of recycled content in building materials |
| E-12 Require all new multi-unit buildings and major renovations to existing multi- unit buildings to be "submetered" in order to enable each individual unit to monitor energy and water consumption. | Consistent The Project would be required to comply with require- ments for sub-metering of individual units to monitor energy and water consumption. |

Table 10 Project Consistency with Plan Bay Area 2013 and Alameda County CCAP

| Goals, Targets, and Policies | Consistency |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Green Infrastructure Action Area | |
| G-1 Expand the urban forest (e.g., street trees and trees on private lots) in order to sequester carbon and reduce building energy consumption. | Consistent The Project would require the removal of existing trees on the Project site. However, existing healthy trees along the Project site boundary would be protected during construction by implementing tree protection zones as described in the Arborist Report, and landscaping would involve extensive planting of replacement trees. |
| Water Use Action Area | |
| WT-2 Require new landscape projects to reduce outdoor potable water use by 40 percent. | Consistent The Project would be required to comply with this County requirement to reduce outdoor potable water use for landscaped areas as applicable. |
| Waste Action Area | |
| WS-1 Increase solid waste reduction and diversion to 90 percent by 2030. | Consistent The Project would be required to comply with any future County requirements to minimize solid waste, if applicable. The Project would also comply with 2016 CALGreen standards requiring at least 65% construction and demolition waste diversion, a maximum of 3.4 pounds waste per square foot, and would provide readily accessible areas for recycling of paper, cardboard, glass, plastics, organic waste and metals (CalRecycle 2016). |

As demonstrated in the analyses above, the Project would be consistent with BAAQMD GHG significance thresholds, per-person significance thresholds consistent with SB 32, and local and regional plans to reduce GHG emissions. Therefore, the Project would be consistent with state policies, as well as local and regional policies to reduce GHG emissions. Impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

| | CULTURAL RESOURCES ould the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5? | | | x | |
| b) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5? | | x | | |
| c) | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | x | |
| d) | Disturb any human remains, including those interred outside of formal cemeteries? | | x | | |

Impacts

6a. Historical Resources

There are no designated historic buildings on the Project site and the Project site is not located in a historic district (NPS 2014). A Historic Resources Evaluation (HRE) conducted by Preservation Architecture in December 2016 confirmed that the Project site does not contain any properties that qualify for designation as "historic" (see Appendix C). The Project site is also not identified as a county landmark or as having a "contributing building" by the County, although a number of such sites have been identified in the vicinity, including 3596 Jamison Way (located less than 300 feet east of the Project site) and Castro Village Shopping Center, which is one of the first shopping centers in the County (located directly south of the Project site) (Alameda County 2008). The proposed residential infill development would not have indirect adverse effects on the setting of any offsite historical resources.

NO: LESS THAN SIGNIFICANT IMPACT

6b, d. Archaeological Resources, Human Remains

The site is generally flat, does not contain unique geologic features, and has been previously graded for historic agricultural use and residential development. There is a known prehistoric Native American site with bedrock mortars approximately 1.3 miles southeast of the Project site at Crow Canyon Road and Castro Valley Boulevard (site ID: CA-ALA-60), which is thought to date back more than 8,000 years (Bay Area Native Sites 2017). This site indicates that there are archaeological resources in the general area of the Project site. However, because the Project site has been extensively graded previously, surficial or archaeological resources that may have been present at one time have likely been disturbed and the topmost layers of soil in the Project area are not likely to contain substantive archaeological resources or human remains. Construction is anticipated to require primarily shallow disturbance of soil on-site as there are no underground features that would require deeper excavation, with the exception of utility trenching to a depth of five to six feet. Therefore, it is unlikely that development of the Project would unearth substantive cultural resources. Similarly, potential offsite construction work associated with replacement of a sewer main along Jamison Way is unlikely to disturb cultural resources as it would occur within a previously graded and paved roadway and involve targeted excavation and trenching around an existing sewer line. Although not anticipated, the possibility exists for archaeological resources to be present on-site and impacts would be potentially significant.

Mitigation Measures

The following mitigation measures would reduce impacts to a less than significant level.

CR-1 Unanticipated Discovery of Cultural Resources. If unanticipated cultural deposits are encountered during any phase of Project construction or land modification activities, work shall stop within 50 feet of the discovery, the County shall be notified, and a professional archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology shall be retained to assess the nature, extent, and potential significance of the discovery. If the resources are determined to be Native American in origin, the applicant shall consult with the County to begin Native American consultation procedures, as appropriate. If the discovery is determined to be not significant, work will be permitted to continue in the area.

Potentially significant resources may require a Phase II subsurface testing program to determine the resource boundaries within the Project site, assess the integrity of the resource, and evaluate the site's significance through a study of its features and artifacts. If, in consultation with the County, a discovery is determined to be significant, a mitigation plan shall be prepared and implemented in accordance with state guidelines. If impacts to the resource cannot be avoided, a data recovery plan shall be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort shall be curated at a qualified facility.

CR-2 Human Remains Recovery Procedures. If human remains are discovered, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner will notify the NAHC. The NAHC will determine and notify a Native American most likely descendant (MLD). The MLD will complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Incorporation of the mitigation measures listed above would mitigate potential impacts to cultural resources to a less than significant level.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

6c. Paleontological Resources

The Project site is underlain by relatively young Holocene-era alluvial soils (Qa) (Dibblee and Minch 2005) with a low potential to contain paleontological resources and has been extensively graded. Therefore, it is not expected that the proposed grading to a depth of up to six feet on the project site would disturb intact paleontological resources. Moreover, the potential offsite construction work associated with replacement of a sewer main along Jamison Way is unlikely to disturb paleontological resources as it would occur within a previously graded and paved roadway and would involve targeted excavation and trenching around an existing sewer line. Impacts would be less than significant.

NO: LESS THAN SIGNIFICANT

| 7. GEOLOGY AND SOILS Would the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | x | |
| Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | × | |
| ii) Strong seismic ground shaking? | | | х | |
| iii) Seismic-related ground failure, including liquefaction? | | | x | |
| iv) Landslides? | | | x | |
| b) Result in substantial soil erosion or the loss of topsoil? | | | x | |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | x | | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | x | | |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | x |

Impacts

7a-i. Earthquake Fault Rupture

The Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. No known surface expression of active faults has been identified in the site, as noted in the geotechnical report prepared for the Project by ENGEO Inc. in March 2016 (ENGEO Inc. 2016). Therefore, exposure of people or structures to adverse impacts resulting from the rupture of a known earthquake fault would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

7a-ii. Seismic Ground Shaking

The Project would be located in the San Francisco Bay region, which experiences numerous small earthquakes each year and has experienced major earthquakes in the past that have involved strong seismic ground shaking. The Project site is located near five major faults: Hayward-Rogers Creek (approximately 1.2 miles away), Calaveras (7.2 miles), Mount Diablo (10.7 miles), Concord (14.7 miles), and San Andreas (19.4 miles) (ENGEO Inc. 2016). These faults have a moment magnitude1 potential of 7.3, 7.0, 6.7, 6.8, and 8.1, respectively. A strong seismic event along any of these faults could create substantial groundshaking, as is the case throughout the San Francisco Bay Region (California Geological Survey

¹ The moment magnitude scale is roughly comparable to the more familiar Richter scale, but ranks the magnitude of an earthquake in terms of energy released, rather than the amplitude of its seismic waves near the epicenter.

[CGS] and U.S. Geological Survey [USGS] 2008). The 2016 California Residential Code (CRC) includes standards to reduce hazards to structures and people resulting from strong seismic activities. As design and construction of the Project would be required to comply with CRC standards, exposures of people or structures to potential substantial adverse effects from strong seismic ground shaking would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

7a-iii. Seismic Ground Failure

The Preliminary Geotechnical Exploration conducted by ENGEO concluded that the risk of liquefaction at the Project site is low (ENGEO Inc. 2016). The Project site is not mapped in a liquefaction hazard zone by the California Geologic Society and the soils on-site are fine-grained, rather than granular, and so are not susceptible to liquefaction. The study also concluded that the Project site has low to negligible risk of other seismic-related ground failure, such as lateral spreading or subsidence. Therefore, the Project would not to expose people or structures to potential substantial adverse effects involving seismic-related ground failure.

NO: LESS THAN SIGNIFICANT IMPACT

7a-iv. Landslides

The Project site and surrounding area is generally flat and fully urbanized. Therefore, the risk of landslides on-site is low to negligible (ENGEO Inc. 2016) and impacts due to landslide risk would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

7b. Erosion

There is potential for soil erosion to occur at the site during site preparation and grading activities associated with the Project, as well as offsite construction activities associated with the potential replacement of a sewer main along Jamison Way. However, all Project construction activities would be required to comply with County Ordinance Code regulations to limit erosion during construction (Section 15.36.600, Erosion and sediment control). Onsite construction activities would also be subject to National Pollution Discharge Elimination System (NPDES) Construction General Permit requirements, which apply to construction sites greater than an acre. As discussed in Section 9, *Hydrology and Water Quality*, these requirements include the preparation and implementation of a stormwater pollution prevention plan (SWPPP) and incorporation of best management practices (BMPs) to prevent sediment and other forms of pollution from entering waterways. In addition, the Project would be required to comply with County Ordinance Code Section 16.16.080, Erosion and siltation control, which sets design requirements for new development, such as including debris basins. The flat topography of the site and the Project's compliance with regulatory requirements would result in a less than significant impact to soil erosion and topsoil loss.

NO: LESS THAN SIGNIFICANT IMPACT

7c. Geologic Instability

As stated above, the Project site is located within an area with low to negligible risk of landslides, lateral spreading, subsidence, or liquefaction (ENGEO Inc. 2016) and the Project would be required to be constructed in accordance with CRC standards. However, the Preliminary Geotechnical Exploration for the Project indicates that there may be undocumented existing fills on the site that could undergo vertical

movement and may be inadequate to support the proposed building loads. Therefore, impacts would be potentially significant.

Mitigation Measure

The following mitigation measure, as recommended in the geotechnical study, shall be incorporated to reduce the impact of potentially unstable fill to a less than significant level.

GEO-1 Existing Fill Removal. As recommended in the Preliminary Geotechnical Exploration prepared by ENGEO for the Project, the applicant shall completely remove existing fill down to native soil. The native soil shall be scarified and moisture conditioned before being covered with new engineered fill. These recommendations shall be included in final grading and building plans submitted for County review and approval.

Incorporation of this mitigation measure would reduce the potential impact of unstable existing fill to a less than significant level.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

7d. Expansive Soil

The Preliminary Geotechnical Exploration for the Project concluded that surface soil on-site may have moderate expansive potential due to the higher clay content in the soil. Underlying moderately to highly expansive soils found at nearby sites indicate the Project site may also be underlain by expansive soils. The Preliminary Geotechnical Exploration includes recommended mitigation measures that must be incorporated by the Project to reduce risks associated with expansive soils to a less than significant level.

Mitigation Measure

The following mitigation measure shall be incorporated to reduce the potential impact of expansive soils to a less than significant level.

GEO-2 Expansive Soil Mitigation. As recommended in the Preliminary Geotechnical Exploration prepared by ENGEO for the Project, the applicant shall evaluate the expansion potential of the property soils at the time of design-level study and mitigate expansive soils through appropriate foundation design and during grading activities as recommended in the design-level study. Mitigation may include the use of a mat foundation, incorporating fill specifications tailored to the on-site soil expansiveness, and keeping exposed soils moist by occasional sprinkling during grading.

Incorporation of this mitigation measure would reduce the potential impact of expansive soils to a less than significant level.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

7e. Wastewater Disposal Systems

The Project site would be served by an existing sewer system run by the Castro Valley Sanitary District. The Project would not involve the use of septic tanks or any other alternative waste water disposal systems. Therefore, no impact resulting from the use of septic tanks or alternative wastewater disposal systems would occur.

NO IMPACT

| | 8. HAZARDS AND HAZARDOUS MATERIALS Would the project: | | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|-------------------------------------|---------------|
| a) | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | × | |
| b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | × | |
| c) | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | × | |
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | x | | |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | x |
| f) | 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? | | | x | |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | x | |
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | x |

Impacts

8a, b. Transport, Use, Disposal, and Accidental Release of Hazardous Materials

The Project would involve the demolition of nine existing residences and associated structures and construction of 27 two-story townhomes on a 1.89-acre site. Residential uses typically do not use or store large quantities of hazardous materials. Potentially hazardous materials such as fuels, lubricants, and solvents would be used by heavy machinery during construction of the Project. However, the transport, use, and disposal of hazardous materials during the construction would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Adherence to these requirements would minimize hazards from transport, use, or disposal. In addition, the Project would involve removal of the existing swimming pool and the use of associated cleaning chemicals. The proposed residential uses also would not involve activities that could lead to the reasonably foreseeable accidental release of hazardous materials. Therefore, impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

8c. School Exposure to Hazardous Emissions

The nearest existing schools are Castro Valley Elementary School, located approximately 0.2 miles west of the Project site, Castro Valley High School located 0.3 miles to the north, and Marshall Elementary School located 0.6 miles to the east. Although the Project site is located within one-quarter mile of an existing school, the land use on-site would remain residential and would not involve the regular handling or emission of hazardous materials. As discussed in checklist items 8a and 8b, potentially hazardous substances used during construction and operation of the Project would be handled according to all applicable laws. Therefore, the Project would have a less than significant impact related to the exposure of schools to hazardous materials.

NO: LESS THAN SIGNIFICANT IMPACT

8d. Hazardous Material Sites

A Phase I Environmental Site Assessment prepared for the Project by ENGEO in March 2016 (see Appendix D) found that traces of agricultural chemicals may remain in the soil on-site from historic use of the property as an orchard from at least the 1930s to the 1940s. To evaluate the potential for residual contamination with organochlorine pesticides (OCPs) and arsenical herbicides, ENGEO collected initial soil samples at a depth of three to nine inches at four locations on the Project site on March 25, 2016. Chlordane, dieldrin, and arsenic were detected at concentrations exceeding the U.S. Environmental Protection Agency's Region 9 Residential Regional Screening Levels (RSLs) dated May 2016. To further characterize the extent of contamination, ENGEO took an additional 22 soil samples from 10 locations on-site at depths ranging from 3 to 24 inches below the ground surface. Table 11 summarizes the results of these additional samples, as reported in ENGEO's *Agricultural Chemical Impact Assessment* from April 2016 (see Appendix D), and compares them to RSLs.

| Soil Contaminant | Maximum Concentration | U.S. EPA Residential Regional Screening Level | Exceeds Threshold? |
|---------------------|-----------------------|--------------------------------------------------|-----------------------|
| Arsenic | 16 mg/kg | 0.68 mg/kg | Yes |
| Chlordane | 5,300 µg/kg | 1,700 µg/kg | Yes |
| DDE ¹ | 15,000 µg/kg | 2,000 µg/kg | Yes |
| DDT ² | 24,000 µg/kg | 1,900 µg/kg | Yes |
| Dieldrin | 420 µg/kg | 34 µg/kg | Yes |

Table 11 Concentrations of Soil Contaminants On-Site

 $^{T}DDE = dichlorodiphenyldichloroethylene$

² DDT = dichlorodiphenyltrichloroethane

Source: ENGEO, Agricultural Chemical Impact Assessment, April 2016 (see Appendix D).

As shown in Table 11, concentrations of arsenic, chlordane, DDE, and dieldrin in soil on-site were found to exceed their respective RSLs. Furthermore, arsenic levels were detected above the maximum naturally occurring background level of 11 mg/kg in California soil (Kearney Foundation of Soil Science, 1996). In addition, concentration of contaminants in some cases exceeded their respective Total Threshold Limit Concentration, which classifies the soil as Class II California Hazardous Waste. Because of soil contamination from historic agricultural use, the Project site is an active Voluntary Cleanup site under the oversight of the California Department of Toxic Substances Control (DTSC 2017). Without proper remediation, grading of the site would disturb contaminated soil and could expose people to health hazards.

The Project would also involve demolition of existing residences that were built prior to the mid-1970s and could potentially contain lead-based paint and asbestos. Buildings built before 1978, when the federal government banned consumer uses of lead-containing paint, may pose a hazard to human health (U.S. EPA 2016a). Potential sources of contamination include the cracking, chipping, or peeling of paint from

interior and exterior surfaces, as well as nearby soil where paint fragments may have landed. Lead in soil may be inhaled if particulates are resuspended in the air. The potential release of asbestos, a mineral fiber, would increase the risk of developing lung disease (U.S. EPA 2016b). Historically, asbestos-containing materials (ACMs) have been used in a variety of building products, including roofing shingles, ceiling and floor tiles, and cement.

The Phase I report recommended pre-demolition surveys for lead-based paint and ACMs to determine if these hazards are present. Consistent with this recommendation, construction activities would be required to comply with regulations of the California Division of Occupational Safety and Health (CalOSHA) regarding lead-based materials. California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards. The applicant also would be required to conduct these surveys in compliance with Bay Area Air Quality Management District (BAAQMD) rules. Pursuant to BAAQMD Regulation 11, Rule 2, a thorough survey of the buildings to be demolished for the presence of ACMs would be prepared by a qualified inspector (BAAQMD 1998). Demolition and disposal of ACMs would be conducted in accordance with procedures in sections 303 and 304 of this BAAQMD rule.

In addition to identifying known and potential hazards on-site, the Phase I report included a search of databases of hazardous materials sites. The nearest active listed site, other than the Project site, is located approximately 625 feet southeast of the Project site at 20457 Redwood Road in Castro Valley (DTSC 2017). At this site, previously occupied by Marshall Steel Cleaners, a dry cleaning business, the DTSC identified lead as the potential contaminant of concern. Groundwater at this location flows south; therefore, contaminants still present at the cleanup site and area groundwater would travel in the direction away from the Project site (SWRCB 2015). Based on the distance to the Project site and the regional topographic gradient, there is no evidence that this or other listed sites would result in health hazards on the Project site (ENGEO 2016).

Impacts from historic agricultural contaminants would be potentially significant without mitigation.

Mitigation Measure

Mitigation Measure HAZ-1 would be required to adequately assess the extent of soil contamination on the Project site and safely dispose of contaminated soil at an offsite location.

HAZ-1 Soil Testing and Disposal. Prior to obtaining a grading permit, the applicant shall retain a qualified environmental site assessor to conduct additional soil samples on the Project site that step outward from the sampling locations reported in ENGEO's April 2016 Agricultural Chemical Impact Assessment. These soil samples shall be sufficient to completely delineate the vertical and lateral extent of concentrations of arsenic and organochlorine pesticides that exceed the latest Residential Regional Screening Levels (RSLs) provided by the U.S. Environmental Protection Agency's Region 9. The volume of soil with contaminants that exceeds their respective RSLs shall be disposed of at a facility licensed to receive Class II California Hazardous Waste, such that remaining soil on-site does not exceed RSLs.

Implementation of Mitigation Measure HAZ-1 would ensure that soil contamination from historic agricultural activities is remediated to the extent that people on-site are not exposed to health hazards. Impacts would be less than significant with mitigation.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

8e, f. Airport Safety

The Project site is not located within an airport land use plan or two miles of an airport (Alameda County, California Airport Land Use Commissions [ALUC] 2016). The nearest airport is the Hayward Executive Airport, located approximately 3.3 miles southwest of the Project site. In addition, no private airports or air strips are located in the immediate vicinity of the site. The second nearest airport is Oakland International Airport, which is located about seven miles to the northwest. The nearest heliports include the Sutter Health-Eden Medical Center Heliport, located approximately 0.6 miles almost directly west of the site, and the Naval Hospital Heliport, which is located approximately nine miles to the northwest, in Oakland. Given the distance between the nearest airports, heliports, and the Project site, the Project would not result in airport-related safety hazards that could impact people residing or working on-site.

NO: NO IMPACT

8g. Emergency Response

As required by State law, Alameda County has established emergency preparedness procedures to be prepared for and respond to a variety of natural and manmade disasters that could confront the community. Emergency and disaster planning is primarily conducted through the Public Health Department, in collaboration with other County departments. Construction and operation of the Project would not interfere with any existing emergency response plans in Alameda County. Construction may result in temporary traffic issues; however, the County would be informed of the construction schedule prior to the initiation of any construction or demolition activities. No roads would be permanently closed as a result of the Project, and the Project would not involve the construction of any structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Additionally, the Project would be built according to all applicable safety codes to ensure safety and structural integrity. Therefore, impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

8h. Wildfire Hazards

The Project site is located in an urbanized part of Castro Valley and there are no wildlands in the vicinity. Lake Chabot Regional Park and Anthony Chabot Regional Park are located approximately two miles north of the Project site, while Garin Regional Park and Dry Creek Pioneer Regional Park are located approximately five miles to the south. As shown in CAL FIRE's mapping of Very High Fire Hazard Severity Zones in Alameda County, the Project site is not located in a fire hazard severity zone (CAL FIRE 2008). Therefore, residents at the proposed townhomes would not be at risk of exposure to a substantial risk of loss, injury or death involving wildland fires; therefore impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

| | HYDROLOGY AND WATER QUALITY ould the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mittigation | NO: Less Than Significant Impact | NO: No Impact |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------|-------------------------------------|---------------|
| a) | Violate any water quality standards, conflict with water quality objectives, fail to meet waste discharge requirements, significantly degrade any surface water body or groundwater, or adversely affect the beneficial uses of such waters, including public uses and aquatic, wetland and riparian habitat? | | | × | |
| b) | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | x | |
| c) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (i.e. within a watershed)? | | × | | |
| d) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff (e.g., due to increased impervious surfaces) in a manner which would result in flooding on- or off-site (i.e. within a watershed)? | | × | | |
| e) | Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems due to changes in runoff flow rates or volumes? | | x | | |
| f) | Result in a significant increase in pollutant discharges to receiving waters (marine, fresh, and/or wetlands) during or following construction (consider- ing water quality parameters such as temperature, dissolved oxygen, turbid- ity, and typical stormwater pollutants such as heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen- demanding substances, and trash)? | | | x | |
| g) | Result in an increase in any pollutant for which a water body is listed as impaired under Section 303(d) of the Clean Water Act? | | | x | |
| h) | Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | × | |
| i) | Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | x | |
| j) | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | × |
| k) | Inundation by seiche, tsunami, or mudflow? | | | x | |

Setting

The majority of Castro Valley is within the San Lorenzo Watershed, which includes Chabot, Castro Valley, Cull, Crow, and Sulphur Creeks. Various creek segments are natural, or managed in concretelined or earthen channels, or are contained in a closed conduit (culvert). With the exception of minor drainage to San Leandro Creek and Lake Chabot, streams and surface runoff from the Castro Valley area converge and flow into San Lorenzo Creek and then to San Francisco Bay. The two nearest creeks to the Project site are Castro Valley Creek, 0.3 miles to the east and Chabot Creek, 0.6 miles to the west. Chabot Creek and Castro Valley Creek have been engineered to convey stormwater flows to avoid or reduce flooding. These Creeks generally flow year round from the hills through urbanized portions of the community and are primarily contained in incised or concrete channels. Chabot Creek is an open, natural channel along Carlos Bee Park, 1.1 mile south of the Project site area. The Project site is generally flat and rectangular with an elevation ranging from 198 to 233 feet above mean sea level at the center of Castro Valley (Alameda County 2012). An estimated 3,400 square feet of adjacent area, including some properties north of the Project site, drains to the site as low-flow stormwater run-on, contributing modestly to the total existing drainage from the site.

Impacts

9a, f. Water Quality

Construction activities on-site would have the potential to cause soil erosion from exposed soil, an accidental release of hazardous materials such as vehicle fuels and lubricant, or temporary siltation from stormwater runoff. Soil disturbance would occur during the removal of existing vegetation, grading for the proposed townhome foundations, the private access driveway, alleys, and bio-retention basin, and trenching for expansion of existing underground utilities would disturb soil.

The construction of 27 townhomes, access driveways and parking, and on-site sidewalks would increase the amount of impervious surface area from its current condition of 43% impervious surface to 75% impervious surface. Impervious surface prevents storm water from being absorbed into the soil. During the life of the Project, contaminants such as cleaning solvents, pesticides, fertilizers, lubricants, metals, and fuel products may be deposited into surface runoff. As potential contaminants flow over the impervious surfaces, the water picks up and carries away these pollutants, which might be present on these surfaces. In this way, the stormwater acts as a vehicle for pollution entering the storm water drainage system.

However, because the Project would involve grading on at least one acre, it would be required to comply with regulations established under the National Pollution Discharge Elimination System (NPDES) program as part of Section 402 of the Clean Water Act to control both construction and operation (occupancy) storm water discharges. The federal Clean Water Act was first adopted in 1972 and is intended to protect and preserve water supply and quality in the "waters of the nation". In the Bay Area, the San Francisco Regional Water Quality Control Board (RWQCB) administers the NPDES permitting program and is responsible for developing permitting requirements. Under the conditions of the permitting program, the applicant would be required to eliminate or reduce non-storm water discharges to waters of the nation, develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. As such, the Project would be subject to the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) – NPDES Permit No. CAS612008, and the provisions set forth in Section C.3 *New Development and Redevelopment*.

Prior to beginning construction, the applicant would be required to prepare a SWPPP for the Alameda County Public Works Agency (PWA), which incorporates post-construction stormwater quality controls,

and receive approval of the SWPPP from the State Water Resources Control Board (SWRCB). The SWPPP must include Best Management Practices (BMPs) specific to Project construction and is subject to inspections by a Qualified Stormwater Professional (QSP). BMPs aim to control degradation of surface water by preventing soil erosion or pollution discharge from the Project site. To comply with these stormwater requirements, the Project would involve installation of a bio-retention basin on the southwestern corner of the Project site fronting Jamison Way to the west of the driveway and ancillary bio-retention cells along the landscaped perimeter of the site. The bio-retention basin would be sized to detain and process stormwater runoff from the entire Project site.

By adhering to the provisions of NPDES Section C.3 and the SWPPP, the Project would not result in adverse effects on water quality and or in the violation of water quality standards or waste discharge requirements during construction or operation. Furthermore, the Project would retain residential land use on-site and would not introduce commercial or industrial uses to the site that could introduce new types of water pollutants. Therefore, the Project would have a less than significant impact on water quality.

NO: LESS THAN SIGNIFICANT IMPACT

9b. Groundwater Supply

The Castro Valley groundwater basin (No. 2-8) is part of the San Francisco Bay hydrologic region (Alameda County 2012). The basin is three square miles in area bounded on the east by the San Lorenzo Creek and by the Hayward Fault on the west. The principal water bearing units within the basin are Pleistocene alluvial deposits including clays, silts, sands, and gravels. Groundwater outside the central sub-basin area is replenished by direct infiltration and percolation of rainfall (approximately 18 to 24 inches annually); excess applied irrigation water and subsurface inflow from adjacent foothills.

The Project would not involve construction of any wells, pumping, or extraction of groundwater. Potable water for the future townhomes would be provided by the EBMUD. Thus, the Project would not affect local groundwater or groundwater recharge. In addition, the development would not introduce substantial new impervious areas such that it would interfere with the areas or rates of groundwater recharge. Based on the existing groundwater level of 10 feet on-site, the proposed shallow disturbance of soil and utility trenching to an anticipated depth of up to six feet on-site would not require dewatering of groundwater (ENGEO Inc. 2016). Therefore, the Project would not result in a net deficit in aquifer volume or a lowering of the groundwater table. Impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

9c, d, e. Drainage Patterns, Surface Runoff, and Flooding

There are no streams or rivers present on or around the Project site or surrounding parcels. As noted above, the nearest creeks are more than a quarter mile from the site. Although the Project would increase the area of impervious surface on-site, as discussed under checklist items 9a and 9f, the proposed bioretention areas covering 2,000 square feet of the site would detain stormwater runoff before it leaves the site. As a result of such stormwater controls, the Project would not increase the rate or amount of surface runoff from the site. A 1,085-square foot primary bio-retention basin to the west of the driveway would extend approximately 80 feet north from Jamison Way, and an additional 735 square feet of bio-retention area would be installed to the west of the driveway in the northern half of the site. As discussed in the Project Description, the depth of ponding during a design storm event (as defined in Alameda County C.3 Guidance Document) would be no more than 12 inches, and the duration of such ponding would not exceed three hours. Other ancillary bio-retention cells may be included in the landscape areas throughout the site to meet the requirements outlined in the Alameda County C.3 Stormwater Technical Guidance, which provides guidance for developers to meet Provision C.3 of the Municipal Regional Stormwater Permit.

In addition, the site vicinity is currently urbanized, and is connected to an existing stormwater drainage system located in the Alameda County Water Conservation District's Zone 2. Stormwater runoff in the area is currently directed through a series of stormwater drainage facilities to San Lorenzo Creek, and eventually to the San Francisco Bay; these drainage patterns would be maintained with the Project. The Project site also would be subject to the continued low-flow run-on from approximately 3,400-square feet of adjacent areas, which if blocked by the Project or not otherwise diverted to a storm drain, could represent an alteration of the existing drainage patterns of the site or area, and result in flooding or substantial erosion or siltation on- or off-site. In order to reduce potential impacts to drainage patterns of the site or area, and the potential for substantial erosion or siltation on- or off-site, implementation of Mitigation Measure H-1 would be required to reduce impacts to a less than significant level. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measure

The following mitigation measure would be required to avoid or reduce the Project's potentially significant impacts to drainage patterns and erosion resulting from low-flow run on that would be received from adjacent areas.

H-1 Address Off-Site Run-On. Prior to obtaining a building permit, the Project applicant shall prepare and submit for County approval a drainage plan that addresses low-flow run on from adjacent properties by entering into an agreement with the adjacent property owner(s) to redirect stormwater before it enters the property, or collect and treat such stormwater flows within the on-site bio-retention cells prior to discharge. High flows from on-site or other properties may be bypassed to the roadway to prevent erosion or damage to treatment facilities.

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

9g. Increases in Pollutant Discharges to Impaired Waters

Under section 303(d) of the Clean Water Act, states, territories and authorized tribes are required to submit lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet water quality standards. The law requires that the states establish priority rankings for waters on the lists and develop Total Maximum Daily Loads (TMDL) for these waters. A TMDL is a pollution budget and includes a calculation of the maximum amount of a pollutant that can occur in a waterbody and allocates the necessary reductions to one or more pollutant sources. A TMDL serves as a planning tool and potential starting point for restoration or protection activities with the ultimate goal of attaining or maintaining water quality standards. Stormwater runoff from the Project site would flow to Chabot Creek which is not listed as an impaired water body (Holmes 2017). However, Lower San Francisco Bay which is downstream of the Project site is listed for a wide range of contaminants such as dioxin compounds, furan compounds, mercury, and polychlorinated biphenyls (PCBs) (State Water Resources Control Board 2012).

As mentioned under checklist items 9a and 9f, compliance with NPDES permitting requirements and a SWPPP prepared for the Project would prevent adverse effects from offsite discharge of stormwater runoff and associated pollutants. Furthermore, the Project would not introduce commercial or industrial land uses that could generate new water pollutants on-site. Therefore, the Project would have a less than significant impact related to increasing any pollutants for the listed impaired water bodies.

NO: LESS THAN SIGNIFICANT IMPACT

9h, i, k. Flood Hazard Area, Flood Flows, Inundation by Seiche, Tsunami, or Mudflow

Flood-prone areas are generally located in low areas and in close proximity to streams and creeks. During larger storms, flooding could occur primarily as sheet flow in streets and along stream channels. Flood zone mapping by the Flood Insurance Rate Maps (FIRMs) published by Federal Emergency Management Authority (FEMA) indicates that the Castro Valley area is most prone to flooding along Chabot and Castro Valley Creeks, As shown in Figure 10-2 of the Castro Valley General Plan (2012), approximately 132 acres near the concrete and improved channels in the southern portion of Castro Valley are designated as 100-year flood plains, and approximately 250 acres spread around the creeks and closed channels in the northern portion of Castro Valley are designated as 500-year flood plains. The Project site is not located in a 100-year flood hazard area as mapped by FEMA or the Castro Valley General Plan (2012). In addition, the site is not at a shoreline elevation or near a water body where risk of seiche or tsunami would be a hazard; the nearest water body that could experience a seiche event is the San Francisco Bay, and it is not anticipated that a seiche in the Bay would have potential to affect the site. As described in Section VI, Geology and Soils, because the Project site and surrounding area are flat and fully urbanized, the risk of landslides or mudflows at the Project site is low to negligible (ENGEO Inc. 2016). Therefore, the Project site would not be subject to substantial hazards from flooding or inundation by seiche, tsunami, or mudflow. Impacts would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

9j. Risks from Dam Failure

Alameda County has several man-made lakes, including Lake Chabot that lies east of San Leandro and north of Castro Valley. Cull Canyon and Don Castro reservoirs, located less than two miles east of the Project site, are relatively small and pose less extensive safety hazards than larger dams in the County. As shown in Figure 10-2 of the Castro Valley General Plan (2012), the County has mapped no threat from inundation to the Project site. The proposed development would not expose people or structures to potential inundation from dam failure. There would be no impact related to the risks from dam failure.

NO: NO IMPACT

| 10. LAND USE AND PLANNING Would the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) Physically divide an established community. | | | | x |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | × | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | x |

Impacts

10a. Physical Division of Community

The Project site is located in an already urbanized portion of unincorporated Alameda County and is surrounded on all sides by urban development. The Project would replace existing single-family and duplex housing with townhomes on-site and would not include construction of any new roads, linear infrastructure, or other development features that would divide an established community or limit movement, travel, or social interaction between established land uses. No impact would occur.

NO: NO IMPACT

10b. Land Use Plan or Policy Conflict

As an unincorporated area within Alameda County, the Project site is subject to the County's General Plan, which provides a framework for land use and other decision-making. The Castro Valley General Plan, a portion of the Alameda County General Plan adopted in 2012, provides land use designations, goals, and policies for the unincorporated area of Castro Valley. The Project would establish a new townhome development within the Downtown Residential neighborhood (Figure 4-5 *Castro Valley Neighborhoods* of the Castro Valley General Plan) on parcels designated for Residential Mixed Density (RMX) land uses with a maximum allowed density of 29 dwelling units per acre (du/ac; Figure 4-2 *Castro Valley General Plan Land Use* of the GP), and zoned for Suburban Residence (RS, 8-29 du/acre; Figure 4-3 *Existing Zoning* of the GP). The 27 townhomes would result in approximately 14.3 du/ac and therefore would be consistent with the RMX land use and RS zoning designations. Table 12 provides a summary of the existing land use and allowable du/ac, and General Plan land use and zoning designations for the five parcels that comprise the Project site.

| Parcel APN | Existing Land Use | GP Land Use | Existing Zoning |
|------------------|------------------------|------------------------------------------------------------------------|----------------------------------------|
| 084A-0076-020-01 | Residential 0-4 du/ac | | |
| 084A-0076-021-04 | Residential 4-8 du/ac | | |
| 084A-0076-021-06 | Residential 0-4 du/ac | Residential Mixed Density (RMX): 29 du/ac | Suburban Residence (RS): 8-29 du/ac |
| 084A-0076-022-00 | Residential 8-12 du/ac | - (RRMA): 29 du/de | (10): 0 2) du/de |
| 084A-0076-023-00 | Residential 0-4 du/ac | _ | |

Table 12 Land Use and Zoning Summary

The Project site is located along the northern boundary of the Castro Valley Central Business District on Jamison Way, adjacent to the Castro Village core pedestrian retail (CBD-5) area (Figure 4-7, *Central Business District General Plan Land Use* of the GP). Areas adjacent to the site are designated for mixed housing type infill residential development near the Castro Valley Central Business District (Figure 3-1, *Community Development Strategy* of the GP), north of Castro Valley Blvd to Somerset, between Lake Chabot Road and Redwood Road. The Project site's location adjacent to a commercial center is conducive to implementing the major initiatives outlined in the Castro Valley General Plan, especially the following:

- *#12. Castro Valley Neighborhood Centers*: Establishing zoning to allow construction of housing or other uses that provide financial support and viability to commercial centers.
- *#13. Housing In and Around the Town Center*: Adding new housing in and around the town center to meet housing needs for smaller and more affordable units, and offer housing where residents can walk to shops and transit.

Table 13 provides a consistency analysis of the Project with selected applicable Castro Valley General Plan policies, as per CEQA Guidelines Section 15125(d).

| General Plan Policies | Consistent with GP? | Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land Use and Community Development | | |
| Policy 4.3-1 Infill Housing and Mixed-Use. Designate areas for infill housing and mixed-use development to meet a wide range of housing needs. | Yes | The Project would provide new infill housing on a currently developed 1.89-acre site within the Downtown Residential Neighborhood along the northern boundary of the Castro Valley Central Business District on Jamison Way. |
| Action 4.3-9 Streets in New Subdivisions. Streets in new subdivisions shall provide adequate access for residents, emergency vehicles, and service vehicles. Public streets shall be provided for subdivisions greater than 10 lots. In subdivisions with 10 or fewer lots, particularly in hillside areas, private streets may be permitted, provided that they meet established standards. | Yes | As discussed in Section 16, <i>Transportation</i> , the proposed internal circulation system on the Project site would provide adequate site and emergency access. The proposed private driveway and connecting alleys on a subdivision with fewer than 10 lots also would be permitted under Action 4.3-9. |
| Action 4.3-10 Private Street Standards. Establish consistent stand- ards for private streets depending on the number of units that the street will serve the number of required parking spaces per unit, and reasonable access requirements and operational needs of needs of emergency access vehicles | Yes | The Project would provide a 20-foot private driveway with parallel parking on both sides of the driveway. A five-foot-wide sidewalk would be installed along the perimeter of the buildings. The 27 townhome units would each have two covered parking spaces in the garage on the ground level. There would be a total of 20 parallel parking spaces along the private |

Table 13 Project Consistency with the Castro Valley General Plan Policies

| General Plan Policies | Consistent with GP? | Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and garbage. Minimum paved roadway width requirements (i.e., 20 feet for roads serving five or more units or when part of required fire apparatus access, and 12 feet for roads serving between two and five units that is not part of required fire apparatus access). Turnarounds | | driveway, and an additional eight on-street parallel parking spaces. The two alleys between the first and second rows of townhomes, and the third and fourth rows of townhomes would be 20 feet wide as well, and provide ample turnaround space for vehicles. Therefore, the Project would meet private street standards. |
| Landscaping Red curbs and signage for no parking zones Sidewalks, and | | |
| Parking standards. | | |
| Community Character and Design Action 5.1-1 Require Visual Impact Analysis. Require visual impact analysis during the development review process for public and private projects to ensure protection of views to natural areas from public streets, parks, trails, and community facilities. | Yes | As discussed in Section 1, <i>Aesthetics</i> , the Project site is located in a flat, urbanized area of Castro Valley, and no scenic vistas, natural areas, parks, or trails are visible from the site. The Project would not adversely affect scenic views of natural areas. The preliminary design review conducted by Planning Department staff in November 2016 also found the Project to be compliant with Residential Design Standards and Guidelines (2014) related to view protection (Alameda County 2016). |
| Policy 5.2-1 Neighborhood Character. Ensure that new residential development is consistent with the desired community character, protects sensitive biological resources, and is not subject to undue natural hazards. | Yes | The Project site is located in an area with mixed residential densities: Pinehaven Garden Apartment complex to the east, single-family residential homes to the west, townhomes to the north, with the Castro Village Shopping Center to the south. The townhome development would be consistent with the character of the suburban residence (RS) zone. As the Project site and vicinity are fully built out, implementation of the Project would incur no impacts to sensitive biological resources or undue natural hazards. |
| Policy 5.2-2 Residential Design. Ensure that residential development projects comply with all adopted design standards and guidelines. | Yes | The Project would be consistent with Section 2.4 <i>Townhome Standards</i> in the Residential Design Standards and Guidelines for the Unincorporated Communities of West Alameda County (2014) (Alameda County 2016). |

| General Plan Policies | Consistent with GP? | Analysis |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Policy 5.2-3 Design Exceptions. Exceptions to design standards and guidelines will only be considered through a discretionary review process, and only approved if: There are site-specific conditions that make it physically infeasible to follow the standards or guidelines; and, | Yes | The applicant is not requesting exceptions to the Residential Design Standards and Guidelines for the Unincorporated Communities of West Alameda County (2014). |
| • The proposed design provides an equal or better design solution in terms of livability for residents and impacts on neighboring properties. | | |
| Policy 5.2-4 Lot Sizes. Lot sizes shall be consistent with the desired character of the area. | Yes | The Project would involve subdividing the site into eight lots totaling 82,125 square feet. As per Alameda County Municipal Code Section 17.12.060, the minimum lot size for sites zoned Residential Suburban (RS) is 5,000 square feet. Because the average lot size on-site would exceed 10,000 square feet, the proposed lot sizes would be consistent with the character of the area. |
| Action 5.2-7 Development Standards for Townhouses and Rowhouses. Create development standards specific to townhouses and rowhouses in the RSL, RLM, and RMX districts to improve the livability, quality, and appearance of this type of development. Standards shall include but not be limited to: Appropriate densities for townhouses: 12 units per net acre (RSL-3.5, RMX); Appropriate densities for rowhouses: 17-22 units per net acre (RSL 2.5, RLM, RMX); Parking requirements, including ratios for guest parking and reductions for transit proximity; Location of front entrances and garages; | | The Project would be consistent with Section 2.4 <i>Townhome Standards</i> in the Residential Design Standards and Guidelines For the Unincorporated Communities of West Alameda County (2014). To meet parking requirements, the Project would provide 54 garage spaces (2 per unit, all standard / non-tandem) and 28 uncovered visitor parking spaces. Twenty of the parking spaces would be provided along the west side of the access driveway and the remaining eight parking spaces would be provided along the north side of Jamison Way along the Project site. In addition, two ADA-accessible parking stalls would be provided off of the east side of the access driveway, near the middle of the development. Overall, the Project site would have 84 total spaces and an average of 3.1 spaces per unit, which would meet the Section 2.4 <i>Townhome</i> <i>Standards</i> in the Residential Design Standards and Guidelines for the Unincorporated Communities of West Alameda County (2014) |

| General Plan Policies | Consistent with GP? | Analysis |
|-------------------------------------------------------------------------|---------------------|----------|
| • Lot coverage; | Yes | |
| • Building height; | | |
| • Height and setback transitions to adjacent lower density residential; | | |
| • Front, rear, and side setbacks; | | |
| • Design of building facades facing the street; | | |
| Minimum distances between buildings; | | |
| • Size and location of private and common open space; and | | |
| • Landscaping requirements in driveway areas and at unit entrances. | | |

In addition, the Project site is subject to the Association of Bay Area Government's Plan Bay Area (2013), which does not provide any specific policies, but rather provides a vision for housing and transportation development within the plan area. The Project would be consistent with the Plan Bay Area vision for building more housing units in proximity to transit access, as the Project site is 0.7 mile north of the Castro Valley BART Station and there are two bus stops within a quarter mile of the site (north of the site at Somerset Avenue and Santa Maria Avenue, and south of the site at Castro Valley Boulevard and Santa Maria Avenue). Therefore, impacts related to land use consistency would be less than significant.

NO: LESS THAN SIGNIFICANT IMPACT

10c. Conflicts with Applicable Conservation Plans

As shown in Figure 7-1 of the Castro Valley General Plan (2012), the Project site is not located within an area containing special status species or sensitive habitats. Furthermore, there are no habitat conservation plans or natural community conservation plans in force at or near the Project site. No impact would occur.

NO: NO IMPACT

| 11. MINERAL RESOURCES Would the project:a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | × NO: No Impact |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|-------------------------------------|-----------------|
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | x |

Impacts

11a, b. Mineral Resources

No areas within the Project site are zoned or designated for mining uses or are actively mined. The site is not located within a designated Mineral Resource Zone. The Project does not involve the use or mining of mineral resources. The geology and soils of the site do not indicate the potential for valued mineral resources to be present. Therefore, no impact would occur.

NO: NO IMPACT

| | NOISE buld the project result in: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | x | |
| b) | Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | x | | |
| c) | A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | x | |
| d) | A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | x | | |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | × | |
| f) | For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | × | |

Setting

Sound level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

The duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used sound metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted sound level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average sound level). Typically, Leq is summed over a one-hour period.

The time period in which sound occurs is also important since sound that occurs at night tends to be more disturbing than that which occurs during the daytime. The Day-Night average level (Ldn) recognizes this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average sound level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) sound levels to account for the greater sensitivity to noise during that time period.

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Sound level measurements include intensity, frequency, and duration, as well as time of occurrence.

Some land uses are considered more sensitive to noise intrusion than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses.

Policy 11.1-1 in the Castro Valley General Plan (2012) establishes an exterior noise standard of 70 dBA for the siting of new noise-sensitive uses and requires the incorporation of mitigation measures as needed to ensure that interior noise levels are acceptable. While the Castro Valley General Plan does not identify an interior noise standard, the Alameda County Noise Element recognizes one identified by the Federal Environmental Protection Agency (EPA) of 45 dBA Ldn for residential land uses as requisite for the protection of public health and welfare with an adequate margin of safety. These noise standards apply to traffic noise and other contributors to ambient noise.

In addition, Section 6.60.040 of the Alameda County Noise Ordinance establishes regulations and standards regarding the generation of noise from on-site sources like mechanical equipment. The regulations identify exterior noise levels impacting residential or commercial land uses. Noise level standards are set forth in Table 14.

| Category | Cumulative Minutes in one hour period | Daytime, dBA (7 AM – 10 PM) | Nighttime, dBA (10 PM – 7 AM) |
|----------|---------------------------------------|--------------------------------|----------------------------------|
| 1 | 30 | 50 | 45 |
| 2 | 15 | 55 | 50 |
| 3 | 5 | 60 | 55 |
| 4 | 1 | 65 | 60 |
| 5 | 0 | 70 | 65 |

Table 14 Non-Commercial Noise Ordinance Limits

Note: Non-commercial uses include Single- or Multiple-Family Residential, School, Hospital, Church, or Public Library properties.

Source: Alameda County Municipal Code, Section 6.60.040.

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

Vibration impacts would be significant if they exceed the following Federal Railroad Administration (FRA) thresholds:

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

Construction-related vibration impacts would be less than significant for residential receptors if they are below the threshold of physical damage to buildings and occur during the City's normally permitted hours of construction, as described above, because these construction hours are during the daytime and would therefore not normally interfere with sleep.

Two noise measurements were taken in the Project vicinity on Tuesday, January 17, 2017, from 1:26 PM to 2:30 PM. One measurement was taken on the north side of Jamison Way at the entrance of the existing driveway on-site, in order to characterize maximum existing noise levels from traffic on Jamison Way (see **Figure 1**). The other measurement was taken at the intersection of Redwood Road and Jamison Way to characterize noise levels in the neighborhood primarily from traffic on Redwood Road. The measured noise levels at these locations were 59.2 dBA Leq and 68.1 dBA Leq, respectively (see Appendix E for noise measurement results).

Impacts

12a, c. Noise Standards, Increase in Long-Term Noise Levels

Long-term operational noise is addressed here. Temporary construction noise is addressed in checklist item 12d.

Noise associated with operation of the proposed residences may be periodically audible at adjacent singlefamily and multi-family residences. Noise events that are typical of residential developments include music, conversations, doors slamming, and children playing. On-site operations are expected to also involve noise associated with rooftop ventilation, heating systems, and trash hauling. However, noise levels from on-site residential sources would be comparable to those associated with the existing residences on the Project site and with adjacent residences. On-site operational noise associated with the proposed townhomes is not expected to exceed the Alameda County Noise Ordinance's limits for noncommercial uses as shown in Table 14.

The Project would also affect long-term noise in the vicinity by increasing traffic volumes on area roadways. Impacts would be significant if Project-generated traffic results in exposure of sensitive receptors to unacceptable noise levels. The Federal Transit Administration's recommendations in its Transit Noise and Vibration Impact Assessment (2006) were used to determine whether or not increases in roadway noise would be significant. The allowable noise exposure increase changes with increasing noise exposure, such that lower ambient noise levels have a higher allowable noise exposure increase. Table 15 shows the significance criteria for increases in traffic-related noise levels caused by the Project. Fifteen-minute noise measurements taken on a weekday afternoon on January 17, 2017, indicate that typical noise levels are 59 dBA Leq on Jamison Way near the Project site but up to approximately 68 dBA Leq near Redwood Road (see Appendix E for detailed noise measurement results and **Figure 16** for measurement locations). Based on Table 15, for residences on Jamison Way near Redwood Road that are subject to existing traffic noise between 65 and 75 dBA, the allowable increase in noise exposure from Project-generated traffic would be 1 dBA, i.e., the maximum increase that would not be considered a significant Project impact or require mitigation.

| Existing Noise Exposure | Allowable Noise Exposure Increase |
|-------------------------|-----------------------------------|
| 45-50 | 7 |
| 50-55 | 5 |
| 55-60 | 3 |
| 60-65 | 2 |
| 65-75 | 1 |
| 75+ | 0 |

Table 15 Significance of Changes in Operational Roadway Noise Exposure (DNL or Leq in dBA)

Source: Federal Transit Administration 2006.

Traffic counts conducted as part of the traffic impact study prepared for the Project (Appendix F) found 194 vehicles traveling on Jamison Way near Redwood Road during the mid-to-late afternoon peak hour. This count is assumed to represent typical weekday peak-hour traffic volumes. The Project would generate an additional eight trips on this segment of Jamison Way during this peak hour, increasing the traffic volume by approximately 4%. (The Transportation Impact Study's estimate of Project-generated trips accounts for reductions from removal of the existing residences on-site and proximity to the Castro Valley BART Station and shopping centers.) This nominal increase in the traffic volume near residences with the highest existing exposure to traffic noise on Jamison Way would not result in an increase in traffic noise that exceeds the Federal Transit Administration criteria of 1 dBA. Therefore, traffic generated by the Project would not have a substantial adverse effect on existing residences.

New residents on the Project site would also be exposed to ambient noise from traffic on area roadways. A noise measurement taken at the edge of the Project site along Jamison Way indicates that the proposed residences would be exposed to exterior noise levels of approximately 59 dBA Leq. This noise level would not approach the Castro Valley General Plan's exterior noise standard of 70 dBA for noise-sensitive uses. The manner in which newer development in California is constructed generally provides a reduction of exterior-to-interior noise levels of about 25 to 30 dBA with closed windows (Federal Transit Administration 2006). Therefore, the exterior-to-interior noise level would be no greater than 34 dBA Leq and would not exceed the interior noise standard of 45 dBA.

Therefore, the Project would have a less than significant impact from the exposure of people to excessive long-term on-site and traffic noise.

NO: LESS THAN SIGNIFICANT IMPACT

12b. Groundborne Vibration

Project construction activities are anticipated to result in some vibration that may be felt on properties in the vicinity of the Project site, as commonly occurs with construction projects. Table 16 identifies vibration velocity levels for different types of construction equipment. Project construction would not involve the use of pile drivers, but will involve the use of bulldozers, excavation equipment and jackhammers for demolition and soil removal and replacement. Additionally, loaded trucks carrying construction materials and soil would operate on the Project site and some surrounding streets during construction.
Lore na Ave wood Rd Jamis on Way н Village Dr Project Location 1 Noise Measurement Location N 100 200 0 Feet

Figure 16 Noise Measurement Locations

Imagery provided by Google and its licensors @ 2016.

| Equipment | Approximate VdB (50 Feet) |
|-----------------|---------------------------|
| Large Bulldozer | 78 |
| Loaded Trucks | 77 |
| Jackhammer | 70 |
| Small Bulldozer | 48 |

Table 16 Vibration Source Levels for Construction Equipment

Source: Federal Transit Administration 2006.

The greatest concentration of construction and grading activity would typically occur, on average, towards the center of the Project site, primarily at least 50 feet from the nearest existing residences, rather than being concentrated right at the property lines. At a distance of 50 feet, residences would be exposed to vibration levels of up to 78 VdB which exceeds the 72 VdB threshold for residences and buildings where people normally sleep, but is below the 100 VdB threshold where vibration causes damage to buildings. The Alameda County Municipal Code, Noise Ordinance (Section 6.60.070 (e)) prohibits construction before seven AM or after seven PM on any day except Saturday or Sunday, or before eight AM or after five PM on Saturday or Sunday; therefore, construction vibration would not be in violation of these limits on construction. However, the Noise Ordinance also provides that the operation of any device that creates a vibration which exceeds the vibration perception threshold of an individual (65 VdB) at or beyond the property boundary of the source would be prohibited on any private property. Therefore, the Project would result in potentially excessive, significant ground-borne vibration.

Mitigation Measure

Mitigation Measure N-1 would be required to reduce vibration from Project construction at adjacent properties.

- **N-1.** Best Management Practices to Assure Acceptable Vibration Levels. The following mitigation shall be implemented by Project construction crews to avoid structural damage due to construction vibration and to reduce the perceptibility of vibration levels at nearby sensitive land uses:
 - Minimize or avoid using clam shovel drops, vibratory rollers, and tampers near the shared property lines of the adjacent land uses.
 - When vibration-sensitive structures are within 25 feet of the site, survey condition of existing structures and, when necessary, perform site-specific vibration measurements to direct construction activities. Contractors shall continue to monitor effects of construction activities on surveyed sensitive structures and offer repair or compensation for damage.
 - Construction management plans shall include predefined vibration reduction measures, notification of scheduled construction activities requirements for properties adjoining the site, and contact information for on-site coordination and complaints.

Additional conditions of approval may be considered to exclude soil excavation or major grading activities on Sundays before noon. Incorporation of Mitigation Measure N-1 would provide the adjacent

residents with assurances that vibration effects would be monitored and minimized to the greatest extent feasible.

NO: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

12d. Temporary Increase in Noise

Construction would generate temporary noise levels that could be audible to sensitive receptors near the Project site, including residences located to the north, west, and east. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location. During construction, construction equipment would be active on the site, and construction workers and trucks would also drive to and from the site.

Table 17 shows typical noise levels associated with equipment that may be used for the construction and associated demolition activities at nearby sensitive receptors. Noise levels associated with these activities would temporarily affect the identified sensitive receptors near and on the Project site. Noise from point sources generally decreases by about 6 dBA per doubling of distance for point source emitters. As noted above, construction activity would typically be most concentrated toward the center of the Project site, approximately 50 feet from the nearest residences, rather than at the property lines. As shown in Table 17, the maximum noise level during construction activities at the nearest sensitive receptor, would be approximately 89 dBA Leq. Noise measurements taken in the vicinity of the Project site indicate that existing noise levels are approximately 59 dBA Leq at residences along Jamison Way. Therefore, construction noise would exceed ambient noise levels in the area and would be expected to cause temporary disturbance to nearby residents. Although construction noise impacts would be temporary, and construction, construction for all of these activities is anticipated to occur over eleven months, during which time construction noise from the Project is considered to be a potentially significant impact.

| Equipment | Typical Level (dBA Leq) 50 Feet from the Source |
|------------|----------------------------------------------------|
| Dozer | 85 |
| Paver | 89 |
| Jackhammer | 88 |
| Truck | 88 |
| Loader | 85 |

| Table 17 | Typical | Construction | Noise | Levels |
|----------|---------|--------------|-------|--------|
|----------|---------|--------------|-------|--------|

Source: Federal Transit Administration 2006.

Mitigation Measure

Mitigation Measure N-2 would be required to reduce the severity of Project construction activity noise and to be moderated in time and extent and minimized by reasonable, available means.

N-2. Best Management Practices to Reduce Construction Noise Levels. The following mitigation shall be implemented to reduce construction noise emanating from the Project site to the surrounding sensitive land uses:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
- Erect temporary noise control blanket barriers, if necessary, along building façades facing construction sites. Noise control blanket barriers can be rented and quickly erected.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the Project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Mitigation Measure N-2 would reduce construction-period noise levels to a less-than-significant level through implementation of noise-reducing best management practices during construction activities.

NO: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

12e, f. Airport Noise

The Project site is not located within an airport land use plan or two miles of an airport (Alameda County, California Airport Land Use Commissions [ALUC] 2016). The nearest airport is the Hayward Executive Airport, located approximately 3.3 miles southwest of the site. The Project site is not in the vicinity of a private airstrip. Therefore, airport noise conflicts would be less than significant. Helicopter noise related to the Eden Medical Center – Summit Hospital, located about 0.6 miles away from the project site, is infrequent enough to be less than significant, and is further moderated by the wide range of approach paths medical helicopters use.

NO: LESS THAN SIGNIFICANT IMPACT

| 13. POPULATION AND HOUSING Would the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | x |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | x | |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | × | |

Impacts

13a. Population Growth

The proposed demolition of nine dwelling units and construction of 27 townhome units on-site would result in a net increase of 18 dwelling units. Based on the rate of 2.96 persons per household in unincorporated Alameda County in 2016, this increase in dwelling units would generate an estimated 53 additional residents (California Department of Finance 2016). Castro Valley had a population of 61,400 residents in 2010, and is projected to grow by about 5 percent (or an additional 3,100 residents) by 2025, for a total population of 64,500 residents (U.S. Census Bureau 2015). The estimated increase in population as a result of the Project would constitute only 1.7 percent of the projected growth of 3,100 residents by 2025, or approximately 0.09 percent of total projected residential population for that year.

An additional 2,442 housing units were/are expected to be added to Castro Valley upon full buildout in 2025 in order to meet the City's housing needs based on Association of Bay Area Government's (ABAG) projected population growth. The 27 townhomes constitute approximately 1 percent of the additional housing units upon 2025 buildout, and would contribute toward meeting the housing needs for the region as projected in Plan Bay Area (2013) and ABAG's population growth projections. Therefore, the Project would not induce substantial population growth relative to anticipated growth in Castro Valley. No impact would occur.

NO: NO IMPACT

13b, c. Displaced Housing and People

The Project would involve demolition of one residential duplex and seven single-family, detached residential units for a total of nine dwelling units. These residences would be vacated and demolished prior to construction of the 27 townhomes. However, the loss of nine existing units would not represent substantial displacement of residents to the extent that the construction of replacement housing elsewhere would be necessary. Furthermore, the Project would replace the demolished residences with 27 townhome units, resulting in a net increase of 18 dwelling units. This increase in density is allowed under the Castro Valley General Plan land use and zoning designations, which support mixed type residential development at 29 du/ac for the Project site. Therefore, impacts associated with the displacement of existing residents would be less than significant.

NO: LESS THAN SIGNIFICANT

| 14. 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: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
| a) Fire protection? | | | x | |
| b) Police protection? | | | x | |
| c) Schools? | | | x | |
| d) Parks? | | | x | |
| e) Other public facilities? | | | × | |

Impacts

14a. Fire Protection

The Alameda County Fire Department (ACFD) provides fire and paramedic service to most of the Castro Valley Planning Area. ACFD Station 24 (20336 San Miguel Avenue) is located one-half (1/2) mile to the west of the Project site, and provides service to the site and vicinity (Alameda County Fire Department 2016). The station has one engine company, which also staffs one truck company, a patrol unit, and houses the Battalion 2 and HazMat Support Unit. ACFD's average response time is five minutes for 90 percent of the emergency calls received, and within 10 minutes for 90 percent of the non-emergency calls received (B. Terra, personal communication. January 18, 2017).

The Project would add 27 townhomes to an area already served by fire protection resources. The estimated net increase of 53 residents (net increase of 18 units x 2.96 persons per household) would not substantially affect fire department service ratios or response times, nor would any new fire protection facilities need to be provided, as the Project site and vicinity are located in an urbanized community and there are no wildlands in the vicinity. The ACFD provided a response to the Project based on preliminary review, and requested fire suppression sprinklers in the structures and signage to clarify the fire access road does not extend to the alleys be incorporated into the Project (Alameda County 2016). With adherence to these requests, the Project would not require an expansion of fire protection facilities, and the impact related to fire protection would be less than significant.

NO: LESS THAN SIGNIFICANT

14b. Police Protection

The Alameda County Sheriff's Office (ACSO) is responsible for police services on all unincorporated lands within the County, including the Project site located in Castro Valley. Castro Valley is patrolled and served by the Eden Township Substation at 15001 Foothill Boulevard in San Leandro. This police station is approximately four miles northwest of the Project site and provides patrol services for over 150,000 citizens within unincorporated Alameda County (Ashland, Castro Valley, Cherryland, San Lorenzo, Sunol, and Livermore Valley). According to the Castro Valley General Plan (2012), patrol services are provided on a 24-hour basis within the General Plan area and the average response times for the ACSO are 11 minutes and 48 seconds for priority calls requiring an emergency response and 17 minutes and 13 seconds for non-emergency calls requiring an urgent response (Alameda County 2012). The ACSO's staffing level for the Castro Valley area are at 1.4 sworn officers per 1,000 residents, which is lower than the countywide staffing level which is 1.6 officers per 1,000 residents.

The Project would add new residents and homes that would require police protection from the Sheriff. Relative to the service population of more than 150,000 people, the estimated net addition of 53 residents would not affect police department service ratios or response times, nor would any new police facilities need to be provided. Therefore, the impact related to police protection resources would be less than significant.

NO: LESS THAN SIGNIFICANT

14c. Schools

Given that approximately 15 percent of Castro Valley's population is between the ages of 5 and 18 (U.S. Census Bureau 2015), it is assumed that the same percentage of residents on the Project site would be school-age children who are eligible to attend schools operated by the Castro Valley Unified School District (CVUSD). Thus, the estimated net increase of 53 residents on-site would include about eight school-age children. In April 2016, the CVUSD expressed a concern based on preliminary Project plans that students moving into the new townhomes may not be able to attend schools closest to the site due to excessive demand at District schools. Most CVUSD schools are currently at or exceeding capacity; however, CVUSD guarantees placement of students who are residents within the district at a CVUSD school, even if placement is not the closest school to the student's place of residency (Paula DeLaRive, Student Services Program Technician, personal communication, January 13, 2017). The Project's contribution to overcrowding at schools in the vicinity would be mitigated by the payment of the statutorily required impact mitigation fee or "developer" fee at rates implemented and applicable to the Project at the time of building permit issuance. Pursuant to Section 65995 (3)(h) of the California Government Code, the payment of statutory fees "... is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Therefore, the Project would have a less than significant impact related to schools.

NO: LESS THAN SIGNIFICANT

14d. Parks

Public parks in the Project vicinity are provided by the Hayward Area Recreation and Park District (HARD) and by the East Bay Regional Park District. Nearby parks include the Castro Valley Community Park (18988 Lake Chabot Road, 1.6 miles from Project site), the Earl Warren Dog Park (4594 Paradise Knolls, 1.5 miles away), the Adobe Art Center (20395 San Miguel Avenue, 0.5 mile away), Carlos Bee Park (1905 Grove Way, Hayward, 1.5 miles away), and the Cull Canyon Regional Recreation Area (18627 Cull Canyon Road, 1.8 miles away). The estimated net addition of 53 residents on-site would result in an incremental increase in the demand for existing park facilities but not to the extent that new park facilities to accommodate residential growth would be necessary. Therefore, the Project would have a less than significant impact related to the development of new park facilities. Section 15, *Recreation*, provides additional analysis pertaining to Project impacts on recreational facilities and parks.

NO: LESS THAN SIGNIFICANT

14e. Other Public Facilities

The Alameda County Public Works Agency provides a variety of services and facilities in the unincorporated areas of the County, mainly roadway maintenance and design and management of flood control projects. The Project would not entail the design and construction of any additional public roadways, flood control measures, or other facilities or services. New residents on-site would be served by the public Castro Valley Library at 3600 Norbridge Avenue, which is approximately 0.7 miles southeast of the Project site. Recently built in 2009, the library contains an extensive book and multimedia area with enough space for up to 161,000 materials, 87 computer terminals, 6,435 square feet for children's services, a bookstore operated by the Friends of the Library, a cafe, and a 2,000 square foot community meeting room and multi-purpose education center (Alameda County Library 2016). The estimated net increase of 53 new residents would incrementally increase demand for library resources but not to the extent that new or physically altered library facilities would be required to adequately serve residents of Castro Valley. Therefore, the Project would have less than significant impacts related to libraries and other public facilities.

NO: LESS THAN SIGNIFICANT

| | RECREATION | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | × | |
| b) | Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | × | |

Impacts

15a. Existing Recreational Facilities

There are 5,915 acres of park and open space area in Castro Valley, including nearly 5,600 acres of regional parkland and 325 acres of neighborhood and community parks (Alameda County 2012). Based on the acreage of neighborhood and community parks to population, Castro Valley has approximately 5.3 acres of parkland for every 1,000 residents. Most Castro Valley neighborhoods are within a 10-minute walk to a neighborhood or community park. Table 18 provides a listing of neighborhood and community parks within a two-mile radius of the Project site.

| 5 | • | v |
|-----------------------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recreational Facility | Distance from Project Site (in miles) | On-Site Facilities and Amenities |
| Adobe Art Center | 0.5 | Visual art classes for all age groups, group picnic areas with barbecues, and a play area |
| Bay Trees Park | 1.7 | Tennis courts |
| Carlos Bee Park | 1.5 | Picnic areas with barbecues, and a playground |
| Castro Valley Community Park | 1.6 | Group picnic areas with barbecues, play area, tennis courts, ball fields, basketball courts, soccer fields, horseshoe courts, snack bar, meeting rooms, open lawn area, splash pad, the Chanticleer's Little Theater, and Community Center |
| Cull Canyon Regional Recreation Area | 1.8 | Swimming lagoon, fishing, and picnic areas |
| De Anza Park | 1.7 | |
| Earl Warren Dog Park | 1.5 | Several play areas for dogs, picnic areas and barbecues, and a playground |

Table 18 Neighborhood and Community Parks within 2-Mile Radius of Project Site

Source: Adapted from Figure 8-1 Parks and Community Facilities of the Castro Valley General Plan (2012) and Google Earth (2017)

As per Alameda County Municipal Code Section 12.20.120, Alameda County, including Castro Valley, requires a standard of five acres of parkland per 1,000 residents. Castro Valley exceeds the County threshold by providing 5.3 acres per 1,000 residents. In addition, the Hayward Area Recreation and Park District (HARD) manages both the regional parkland and many of the local parks throughout Alameda County. Therefore, Castro Valley must also meet the HARD standard threshold requirement of three acres per 1,000 residents (Alameda County 2012).

As stated above, Castro Valley residents benefit from having access to nearly 5,600 acres of regional parkland. When combined with the 325 acres of local parkland for a total of 5,915 acres, this creates a ratio of 9.6 acres of parkland per 1,000 residents. This far exceeds the threshold requirements of both the HARD and the County.

The estimated net addition of 53 residents represents a miniscule increase to overall population. Therefore, the Project would not cause a substantial increase in the use of parkland and recreational facilities which would contribute to the deterioration of those facilities or require the expansion or construction of new park facilities elsewhere. Therefore, impacts would be less than significant.

NO: LESS THAN SIGNFICANT IMPACT

15b. New Recreational Facilities

The proposed central private park area along the east-west axis between the second and third row of townhomes would provide approximately 4,200 square feet of usable common open space for residents on-site. The provision of this common open space would not cause significant impacts to the Project site or vicinity, as discussed throughout this Initial Study. The project also would not substantially increase demand for recreational facilities in Castro Valley. The current ratio of 5.3 acres of parkland for every 1,000 residents for Castro Valley (approximately 325 acres of neighborhood and community parks, divided by an estimated 61,400 residents) would remain effectively unchanged with the addition of 53 new residents. Therefore, the Project would not increase recreational demand to the extent that Castro Valley would be in a parkland deficit relative to the County's standard of five acres of parkland per 1,000 residents. Therefore, the Project would not require the construction or expansion of recreational facilities, and impacts would be less than significant.

NO: LESS THAN SIGNFICANT IMPACT

| | TRANSPORTATION ould the project: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non- motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | | × | |
| b) | Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | | × |
| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | x |
| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | × | |
| e) | Result in inadequate emergency access? | | | × | |
| f) | Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | x | |

Impacts

16a, b. Conflicts with Plan, Ordinance or Policy on Performance of the Circulation System or a Congestion Management Program

The following analysis is based on a Traffic Impact Study for the Project, prepared by Wood Rodgers in January 2017 (see Appendix F).

The Traffic Impact Study analyzed five intersections under "Existing" and "Existing plus Project" AM, mid to late afternoon (MD), and PM peak hour conditions:

- 1. Somerset Avenue/Santa Maria Avenue
- 2. Jamison Way/Santa Maria Avenue
- 3. Castro Valley Boulevard/Santa Maria Avenue
- 4. Jamison Way/Project Access Driveway (under "with-Project" conditions)
- 5. Jamison Way/Redwood Road

Existing Conditions

Table 19 presents traffic operations analysis under existing conditions. Traffic operations were estimated in terms of "Level of Service" (LOS), a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment. LOS "A" represents free-flow conditions with little to no delays, while LOS "F" represents jammed or grid-lock conditions.

| | | | | | Existing Conditions | | |
|---|-----------------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------|-----|------------------------------|
| # | Intersection | Control Type | LOS Criteria | Peak Hour | Delay (S/V) ¹ | LOS | Warrant Met? ² |
| | | | | AM | 84.3 | F | Yes |
| 1 | Somerset Avenue/Santa Maria Avenue | AWSC | D | MD^3 | 108.5 | F | No |
| | | | ILOS CriteriaPeak HourDelay (S/V)1Wa MaAM84.3FMaAM84.3FMaAM108.5FMaPM77.4FMaPM77.4FMaAM16.9CMaPM14.7BMaEMD20.8CPM14.7BAM18.2BPM20.8CPM20.8CPM9.0APM9.5APM9.5APM9.5APM28.5DMD133.5F | Yes | | | |
| | | | | AM | 16.9 | С | No |
| 2 | Jamison Way/Santa Maria Avenue | OWSC | D | MD | 20.8 | С | No |
| | | | | PM | 14.7 | В | No |
| | Castro Valley | | | AM | 18.2 | В | No |
| 3 | Boulevard/Santa Maria | Signal ⁴ | E | MD | 20.4 | С | No |
| _ | Avenue | | | PM | 20.8 | С | No |
| | | | D | AM | 9.0 | А | No |
| 4 | Jamison Way/Project Access Driveway ⁴ | OWSC | | MD | 9.5 | А | No |
| | Dirioway | | | PM | 9.5 | А | No |
| | | | | AM | 28.5 | D | No |
| 5 | Jamison Way/Redwood Road | OWSC | E | MD | 133.5 | F | No |
| | | | - | PM | 99.6 | F | No |

Table 19 "Existing" Conditions Intersection Traffic Operations

Notes:

- 1. For OWSC (One-Way-Stop-Control) and TWSC (Two-Way-Stop-Control) intersections, "worst-case" movement delay is indicated. "Average" control delays (in seconds/vehicle) are indicated for AWSC (All-Way-Stop-Control) and Signal-Control intersections.
- 2. Wrnt Met? = CA-MUTCD based Peak-hour-Volume Warrant #3 (Urban Areas)
- 3. *MD* = *Mid* to late afternoon peak hour conditions.
- 4. Project Access Driveway is considered the existing Project site driveway that serves the existing seven houses and one duplex under "Existing" conditions and the proposed Project site driveway that will serve the proposed 27 townhomes und er "plus Project" conditions.

BOLD indicates unacceptable level of service.

Source: See Appendix F.

The Somerset Avenue/Santa Maria Avenue and Jamison Way/Redwood Road intersections currently experience high queueing and delays during peak hours due to traffic from the nearby Castro Valley High School, Our Lady of Grace Catholic School, and other surrounding residential, institutional and commercial developments. As a result, these intersections already operate at an unacceptable LOS and the Somerset Avenue/Santa Maria Avenue intersection also meets the requirements for a signal warrant, as described below.

Significance Thresholds

Congestion Management Program

According to the Castro Valley General Plan, Circulation Chapter, Policy 6.2-1 (Alameda County Community Development Agency, March 2012), the community currently utilizes LOS "E" as the minimum acceptable LOS threshold for intersections that fall on a Congestion Management Program (CMP) Roadway. CMP roadways include: Castro Valley Boulevard, Center Street, Grove Way, Crow

Canyon Road, and Redwood road. The community utilizes LOS "D" or better as the acceptable LOS threshold for all non-CMP roadway intersections during peak travel periods.

Signalized Intersections

Based on Policy 6.2-1 in the Castro Valley General Plan (2012) and criteria used by other cities within Alameda County, project impacts at signalized intersections would be considered significant if one of the following criteria is met:

- 1. If the addition of project generated traffic to an intersection causes the AM, mid to late afternoon, or PM peak hour LOS of the intersection to degrade from an acceptable LOS ("E" or better for Congestion Management Program intersections or "D" or better for non-Congestion Management Program intersections) to an unacceptable LOS, then the impact is significant; or
- 2. If an intersection operates at an unacceptable AM, mid to late afternoon, or PM peak hour LOS (LOS "F" for Congestion Management Program intersections or LOS "E" or "F" for non-Congestion Management Program intersections) without the addition of project generated traffic, and the addition of project generated traffic increases the average intersection control delay by four (4) seconds or more, then the impact is significant.

Unsignalized Intersections

The County Public Works Agency does not have an officially adopted significance criterion for unsignalized intersections in Castro Valley. The traffic impact study determined that significant impacts would occur if the addition of project-generated traffic caused the average intersection delay for all-way stop controlled intersections, or worst movement delay for one or two-way stop controlled intersections, to degrade to unacceptable levels <u>and</u> caused the intersection to warrant a signal.

Signal Warrants

To determine whether traffic signals should be installed at currently unsignalized intersections, Wood Rogers conducted a supplemental traffic signal warrant analysis based on the *California Manual on Uniform Traffic Control Devices* (CA-MUTCD) from November 2014. The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify the need for installation of a traffic signal at an unsignalized intersection. The CA-MUTCD signal warrant criteria are based upon several factors including volume of vehicular and pedestrian traffic, location of school areas, and frequency and type of collisions. CA-MUTCD indicates that "the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."

Existing Plus Project Conditions

The Traffic Impact Study used *Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition* rates to estimate Project trip generation. The entire proposed development Project can essentially be characterized as the Residential Condominium/Townhouse land use. The following trip generation rates from the ITE were used to estimate Project generated trips:

• **Residential Condominium/Townhouse** – For the proposed Project's 27 townhome units, the "Residential Condominium/Townhouse" (Use Code 230) trip generation rate was used. ITE Trip Generation describes Residential Condominium/Townhouse as: "...*ownership units that have at least one other owned unit within the same building structure.*"

The Project's generated trips were reduced based on the estimated number of trips that would be eliminated from the network once the existing Project site land uses (seven single family residential units and one duplex) are displaced. Existing land use trip generation was estimated using the following trip generation rates from the ITE Trip Generation Manual, 9th Edition:

- Single Family Detached Housing For the existing Project site's seven single family residential units, the "Single Family Detached Housing" (Use Code 210) trip generation rate was used. ITE Trip Generation describes Single Family Detached Housing as: "…all single-family detached homes on individual lots."
- **Residential Condominium/Townhouse** For the existing Project site's one duplex (containing two units), the "Residential Condominium/Townhouse" (Use Code 230) trip generation rate was used (described above).

Due to the Project site's close proximity to the Castro Valley BART station (located within a 0.6 mile walk of the Project site) and nearby shopping center (located on the southern side of Jamison Way), and input from County staff, a 10 percent transit/bicycle/pedestrian reduction of new Project generated vehicle trips was also assumed. Table 20 shows that the Project is projected to generate a total of 112 daily trips, 11 AM peak hour trips, and 11 PM peak hour trips under typical "annual average" traffic demand conditions.

| | | | ay Peak Trips ¹ | | |
|-------------------------------------------------------------------|--------------------|----|-------------------------------|----------------------|--|
| ITE Land Use | Number of Units | AM | PM | Total Daily Trips | |
| Proposed | | | | | |
| 230: Residential Condominium/ Townhouse | 27 | 18 | 21 | 206 | |
| Existing | | | | | |
| 210: Single Family Detached Housing (Reduction) | -7 | -5 | -7 | -67 | |
| 230: Residential Condominium/Townhouse (Duplex) (Reduction) | -2 | -1 | -2 | -15 | |
| Existing total | 9 | 6 | 9 | 82 | |
| Subtotal (proposed minus existing) | 18 | 12 | 12 | 124 | |
| 10% Transit/Bike/Walk Reduction | -2 | -1 | -1 | -12 | |
| Net Total | 16 | 11 | 11 | 112 | |

Table 20 Project Traffic Trip Generation Volumes

Notes: ¹The trips illustrated in this table are based on ITE Trip Generation (9th Edition) calculated and average trip rates, using the fitted curve equations.

Source: Wood Rodgers. 2017.

Table 21 shows projected intersection operations under "Existing plus Project" traffic conditions and the projected change in delay of critical movements from Project-generated trips.

| | | | | | Existing Plus Project Conditions | | | | |
|---|------------------------------|-----------------|-----------------|--------------|----------------------------------|-----|------------------------------|--------------------|--|
| # | Intersection | Control Type | LOS Criteria | Peak Hour | Delay (S/V) ¹ | LOS | Warrant Met? ² | Change in Delay | |
| 1 | Somerset | AWSC | D | AM | 85.4 | F | Yes | 1.1 | |
| | Avenue/Santa Maria Avenue | | | MD^3 | 111.2 | F | No | 2.7 | |
| | Avenue | | | PM | 78.3 | F | Yes | 0.9 | |
| 2 | Jamison Way/Santa | OWSC | D | AM | 17.5 | С | No | 0.6 | |
| | Maria Avenue | | | MD | 21.2 | С | No | 0.4 | |
| | | | | PM | 14.9 | С | No | 0.2 | |
| 3 | Castro Valley | Signal | Е | AM | 18.2 | В | No | 0.0 | |
| | Boulevard/Santa | | | MD | 20.5 | С | No | 0.1 | |
| | Maria Avenue | | | PM | 20.8 | С | No | 0.0 | |
| 4 | Jamison Way/Project | OWSC | D | AM | 9.1 | А | No | 0.0 | |
| | Access Driveway ⁴ | | | MD | 9.6 | А | No | 0.1 | |
| | | | | PM | 9.6 | А | No | -0.1 | |
| 5 | Jamison | OWSC | Е | AM | 27.8 | D | No | -0.7 | |
| | Way/Redwood Road | | | MD | 137.3 | F | No | 3.8 | |
| | | | | PM | 102.0 | F | No | 2.4 | |

Table 21 "Existing Plus Project" Conditions Intersection Traffic Operations

Notes:

- 1. For OWSC (One-Way-Stop-Control) and TWSC (Two-Way-Stop-Control) intersections, "worst-case" movement delay is indicated. "Average" control delays (in seconds/vehicle) are indicated for AWSC (All-Way-Stop-Control) and Signal-Control intersections.
- 2. Warrant Met? = CA-MUTCD based Peak-hour-Volume Warrant #3 (Urban Areas)
- 3. MD = Mid to late afternoon peak hour conditions.
- 4. Project Access Driveway is considered the existing Project site driveway that serves the existing seven houses and one duplex under "Existing" conditions and the proposed Project site driveway that will serve the proposed 27 townhomes under "plus Project" conditions.

BOLD indicates unacceptable level of service.

Source: Wood Rodgers 2017.

As shown in Table 21, the all-way stop-controlled Somerset Avenue/Santa Maria Avenue intersection is projected to continue to operate at unacceptable LOS "F" conditions during the AM, mid to late afternoon, and PM peak hours. The one-way stop-controlled Jamison Way/Redwood Road intersection is projected to continue to operate at unacceptable LOS "F" conditions during the mid to late afternoon and PM peak hours. It is also projected that the signal warrant for urban areas in peak hours would continue to be met at the Somerset Avenue/Santa Maria Avenue intersection under "Existing plus Project" AM and PM peak hour conditions. These "Existing plus Projects" conditions would primarily result from high existing queueing and delays during peak hours from nearby schools. The traffic study found that the Project's net contribution of 112 daily trips and less than a maximum four second delay (during midday peak hour at the Jamison Way/Redwood Road intersection), would not constitute a significant increase in an already impacted scenario. All of the remaining study intersections are projected to operate at

acceptable levels of service during peak hours under "Existing plus Project" conditions. Therefore, the Project would have a less than significant impact on the performance of the circulation system.

NO: LESS THAN SIGNIFICANT IMPACT

16c. Air Traffic Patterns

The nearest airport to the Project site is the Hayward Executive Airport, located approximately 3.3 miles to the southwest. No private airports or air strips are located in the vicinity of the site. Given the distance between the nearest airports and the site, the Project would not result in a change to air traffic patterns and no impact would occur.

NO: NO IMPACT

16d. Hazards Due to a Design Feature

The proposed driveway providing access between Jamison Way and the Project site would potentially result in traffic hazards since the driveway would intersect Jamison Way at a 90-degree angle where there would be adjacent street parking. In order to assure the Project driveway provides sufficient sight-distance to maintain intersection visibility for vehicles exiting and/or entering the Project site and based on common practice, consistency with other driveways within the Project area, and the *California Manual on Uniform Traffic Control Devices Figure 3B-21 (CA) Example of Parking Space Markings*, a 20-foot red curb No Parking Zone along the north side of Jamison Way should be established on both sides of the Project driveway.

The driveway would accommodate up to approximately four queued exiting vehicles without impacting traffic on the proposed southern internal street. The driveway would have a projected worst-case egress queue of approximately 25 feet (or one vehicle), which is 75 feet less than the available storage. In addition, all internal traffic volumes are not expected to be large enough to require traffic control improvements. Nevertheless, potential hazards related to the Project driveway would be potentially significant.

Mitigation Measure

Mitigation Measure T-1 would be required to resolve potential hazards from the design of the Project driveway.

T-1 No Parking Zones. The applicant shall coordinate with the County Public Works Agency to have 20 feet of red curb No Parking Zones painted on either side of the Project driveway. The applicant shall be responsible for the cost of such an installation, and the County Public Works Agency would provide for its maintenance.

Mitigation Measure T-1 would reduce the impact of potential hazards due to the driveway design to a level that is less than significant.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

16e. Emergency Access

The Project would be subject to Alameda County Fire Department review of the site plans, site construction, and the actual structures prior to occupancy, ensuring that required fire protection safety features, including building sprinklers and emergency access, are implemented. This review would include verifying that the proposed site ingress and egress is adequate for police protection and emergency response. Furthermore, the proposed infill development would not hinder emergency access or evacuation on area roadways. Therefore, impacts would be less than significant.

NO: LESS THAN SIGNIFICANT

16f. Conflicts with Policies, Plans, or Programs for Public Transit, Bicycle, or Pedestrian Facilities

The Castro Valley General Plan Circulation chapter includes policies for transit, bicycle, and pedestrian travel within and through Castro Valley. The following policies apply to this section:

- Policy 6.1-1 *Comprehensive Circulation System* Provide a comprehensive system of transportation facilities that includes: streets and highways for regional access; transit facilities; a continuous network of pedestrian sidewalks and bicycle routes; and transportation and parking management programs and measures to encourage the efficient use of these facilities and services.
- Policy 6.1-3 Integrate Land Use and Circulation Planning Make land use decisions in the Central Business District that promote a multi-modal transportation system and reduce reliance on the private automobile, such as allowing higher density mixed-use development near transit.
- Policy 6.4-1 *Promote Transit Use* Promote transit use and reduce reliance on the private automobile in order to reduce congestion, improve air quality, and improve the quality of life in Castro Valley.
- Policy 6.6-6 New Development to Incorporate Pedestrian Facilities Design new development and redevelopment projects to facilitate pedestrian access and address any impacts to the pedestrian safety, access, and circulation.

Public Transit Services

Alameda-Contra Costa Transit District (AC Transit) operate eight bus routes through Castro Valley and four additional routes that serve the surrounding area. AC Transit buses serve the Castro Valley BART station, downtown, nearby medical facilities, and recreation areas. Paratransit service is also provided for users with special needs. Two bus routes operate with the vicinity of the Project area. Bus Route 32 is a two-way loop that runs in Castro Valley, North Hayward, Cherryland, and Ashland. The route has major stops at the Hayward BART station, the Bay Fair BART station, and the Castro Valley BART station. Bus Route 32 travels on Castro Valley Boulevard with designated stops near Santa Maria Avenue and Redwood Road in the Project study area. Bus Route 48 is a point-to-point route that runs between the Bay Fair BART station and the Hayward BART station. Bus Route 48 has stops on Redwood Road just south of Castro Valley Boulevard and on either end of the block of Somerset Avenue between Santa Maria Avenue and Redwood Road in Project area. However, neither Route 32 nor 48 use Redwood Road between Somerset Avenue and Castro Valley Boulevard, so pedestrians have to rely on area sidewalks for safe access to the bus routes.

Bay Area Rapid Transit (BART) provides a system of grade-separated, electric heavy rail trains that transport passengers throughout the Bay Area. The Castro Valley BART station, which is a stop of the Dublin-Pleasanton line, is located on the southwest corner of the Redwood Road / Norbridge Avenue intersection, about a 0.6 mile walk or bike ride from the Project site. The Dublin-Pleasanton line provides direct service to Oakland, San Francisco, and the San Francisco International Airport. Additionally, the Bay Fair station (located in San Leandro) can be used to transfer between the Dublin-Pleasanton and Fremont-Richmond lines and the Hayward station (located in Hayward) can be used to transfer between the Fremont-Richmond and Fremont-Daly City lines.

Residents of the proposed townhomes would be within walking and bicycling distance of bus stops for AC Transit Routes 32 and 48 and the Castro Valley Bay Area Rapid Transit (BART) station, all of which are located within 0.6 miles of the Project site. The Dublin-Pleasanton BART line provides direct service

to Oakland, San Francisco, and the San Francisco International Airport. In addition, the increase in transit ridership caused by the estimated net increase of 53 residents would not substantially affect transit route delay or operations. Impacts related to public transit would be less than significant.

Bicycle Facilities

Residents on-site would be served by the existing and planned class II bike lanes on Castro Valley Boulevard, Redwood Road, and Norbridge Avenue. According to the Castro Valley General Plan (2012), class II bike lanes are proposed to be constructed on Somerset Avenue between Lake Chabot Road and Redwood Road, on Redwood Road between Castro Valley Boulevard and Seven Hills Road (filling in the current gap), and on Castro Valley Boulevard between Redwood Road and Crow Canyon Road (filling in the current gap). In addition, class II bikeways currently exist on the following segments of the study area:

- Redwood Road between North 6th Street and Castro Valley Boulevard and between Seven Hills Road and Camino Alta Mira.
- Castro Valley Boulevard between San Miguel Avenue and Redwood Road and between Crow Canyon Road and Five Canyons Parkway.

These class II bike lanes and those proposed for construction could be used by residents for better bicycle access to nearby destinations and transit stops. For Somerset Avenue, Santa Maria Avenue, and Jamison Way it can be assumed that bicycles would be allowed to share the roadway with vehicles. Therefore, the Project would not conflict with policies related to bicycle facilities.

Pedestrian Facilities

In the site vicinity, Castro Valley Boulevard was recently improved with wider sidewalks and enhanced pedestrian-oriented street furniture and landscaping on both sides between Redwood Road and San Miguel Avenue. Redwood Road has sidewalks on both sides of the road with only one notable and nearby gap of just a dirt pathway on its west side, south of its intersection with Jamison Way, bordering a single small property. Santa Maria Avenue and Jamison Way have sidewalks for most of their lengths; however, there are many individual segments lacking in sidewalk and curb improvements, including the north side of Jamison Way adjacent to the Project site, both sides west of the Project site, and on the south side towards Redwood Road. Somerset Avenue has few sidewalk and curb improvements, and Lorena Way, parallel and between Somerset and Jamison Way has similar characteristics, especially in its eastern half, towards Redwood Road. There are no sidewalks or any off-street pathways connecting the Project site to Santa Maria Avenue.

There are no marked crosswalks within the Jamison Way right of way; the only marked crosswalks lie across Redwood Road and Santa Maria Avenue at each end of Jamison Way. Legal un-marked crossings of Jamison Way exist at Woodbine Avenue and Redwood Road. The signalized Castro Valley Boulevard/ Santa Maria Avenue intersection has pedestrian crosswalks with push buttons on the north and east legs. The all-way-stop-controlled Somerset Avenue/Santa Maria Avenue intersection has pedestrian crosswalks include a roughly 115-foot long dirt or gravel path bordering two properties 450 feet east of the site, on the north side of Jamison Way, and as noted above, an unimproved dirt pathway on Redwood Road immediately south of Jamison Way (an estimated 80 feet in length). There are no sidewalks or other pedestrian improvements that are currently planned in the vicinity.

The Project would provide internal pedestrian access on walkways among the townhome buildings, and provide a new sidewalk along the north side of Jamison Way for the full extent of the Project site frontage. The new Jamison Way sidewalk would connect to an existing sidewalk east of the site. Project site residents could access Bus Route 32 and 48 bus stops, as well as the Castro Valley BART station, on foot via the mostly continuous existing sidewalks and using existing crosswalks with push buttons located

at the Castro Valley Boulevard intersections with Santa Maria Avenue, Wilbeam Avenue and Redwood Road. Castro Valley High School to the north and Castro Valley Elementary School to the west could also be accessed via existing sidewalks along Redwood Road, but as noted above, there are no pedestrian facilities connecting the site to Santa Maria Avenue.

Increased demand for pedestrian access directly to the Castro Village Shopping Center to the south and/or the nearby Central Business District would be expected to result from the Project. In the absence of side-walks connecting the Project site to Woodbine or Santa Maria Avenues, or a continuous paved sidewalk connecting to Redwood Road and in turn to the border of the Castro Village shopping center, Project residents would most likely cross Jamison Way near the proposed Project driveway, where they would in effect be jaywalking without the benefit of a marked or unmarked crossing. The Public Works Agency does not recommend a mid-block crossing of Jamison Way near the Project site due to liability concerns.

Because the only legal and safe crossing would be at Redwood Road on the east terminus of Jamison Way, the Project would have a potentially significant impact related to adopted policies related to pedestrian facilities, and may result in decreased safety due to Project-generated pedestrians being diverted onto the streets where sidewalks are absent. Policy 6..6-6 of the Castro Valley General Plan, to have new development address impacts to pedestrian safety, access and circulation, is considered applicable, especially since the Castro Valley BART station is less than a mile distant from the Project site and the site is immediately adjacent to a the greatest concentration of commercial uses in Castro Valley.

Mitigation Measure

Mitigation Measure T-2 would be required to resolve the potential conflict between motor vehicles on Jamison Way and pedestrians traveling between the Project site and the adjacent Central Business District, local shopping, and the nearing BART Station.

T-2 Sidewalk Improvements on Jamison Way. The applicant shall coordinate with the County Public Works Agency to install or wholly fund sidewalk and curb improvements where they are absent east of the Project site on the north side of Jamison Way, and on the west side of Redwood Road south of Jamison Way.

Mitigation Measures T-2 would reduce the impact or policy conflict between the Project and the Castro Valley General Plan policies promoting a complete network of pedestrian sidewalks and routes to a level that is less than significant.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

| 17. TRIBAL CULTURAL RESOURCES Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| 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) or | | × | | |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?. | | × | | |

Setting

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding tribal cultural resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Impacts

17a, b. Tribal Cultural Resources

According to Appendix G of the State CEQA Guidelines, an impact to tribal cultural resources from the project would be significant if the project would:

1) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Alameda County prepared and mailed formal notification letters in accordance with the provisions of AB 52 to six Native American tribes on January 18, 2017. As of March 1, 2017, no responses have been received and no tribal cultural resources have been identified on-site. Impacts from the unanticipated discovery of tribal cultural resources during construction would be potentially significant.

Mitigation Measure

Mitigation Measure TCR-1 would be required to protect tribal cultural resources in the event of their discovery during construction.

TCR-1 Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, Alameda County shall consult with a qualified archaeologist and begin or continue Native American consultation procedures. If Alameda County determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

Impacts would be less than significant with mitigation incorporated.

NO: LESS THAN SIGNIFICANT WITH MITIGATION

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| 18. UTILITIES AND SERVICE SYSTEMS Would the project: | | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | x | |
| b) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | × | |
| c) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | x | |
| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | x | |
| e) | 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? | | | × | |
| f) | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | x | |
| g) | Comply with federal, state, and local statutes and regulations related to solid waste? | | | x | |

Impacts

18a, b, e. Regional Wastewater Treatment Standards and Waste and Wastewater Treatment Facilities

The San Francisco Bay Regional Water Quality Control Board (RWQCB) establishes standards for the generation of wastewater to and from wastewater treatment facilities, and regulates the discharge of industrial pollutants into treatment facilities. The RWQCB requires such facilities to meet specific standards for water discharged into San Francisco Bay and the Pacific Ocean.

The Project area is serviced by the Castro Valley Sanitary District (CVSan) which provides and maintains the sewage collection system that serves most of Castro Valley. The Oro Loma Sanitary District treats CVSan sewage at the Oro Loma/Castro Valley Water Pollution Control Plant in San Lorenzo. The Oro Loma/Castro Valley Plant operates under a NPDES permit issued by the San Francisco RWQCB and discharges to San Francisco Bay through pipelines operated by the East Bay Dischargers Authority (EBDA) (Alameda County 2012). This plant treats approximately 15 million gallons per day (mgd) of wastewater, with a total capacity of 20 mgd under this NPDES permit (Alameda County 2015). The Oro Loma/Castro Valley Plant and EBDA's systems are generally designed to handle up to a 10-year storm event, and would not be able to convey all the wastewater through the common outfall during high storm tides. As a result, the NPDES permit allows the Oro Loma/Castro Valley Plant to directly discharge a portion of the secondary-treated effluent from overflow weirs to San Francisco Bay instead of the common outfall (RWQCB 2012).

The proposed increase in residential density on-site would result in greater wastewater generation. Based on wastewater generation and capacity figures for the Oro Loma/Castro Valley Treatment Plant from the Ashland and Cherryland Business District Specific Plan (2015), a net increase of 18 residential units and 53 residents would generate an estimated 4,368 gallons of wastewater per day, as shown in Table 22. This

would amount to approximately 0.03 percent of total daily wastewater generation and 0.09 percent of total additional capacity. This nominal increase in sewage flow would not exceed the existing permitted capacity allowed for CVSan under the current NPDES permit, and would not exceed treatment capacities under San Francisco RWQCB.

| Land Use | Net Population Increase | Generation Factor | Flow |
|-----------|-------------------------|---------------------------------|-----------|
| Townhomes | 53 residents | 82.4 gpd ¹ /resident | 4,368 gpd |

Table 22 Projected Wastewater Generation

Source: Adapted from Alameda County, Ashland and Cherryland Business District Specific Plan (2015). 1 gpd = gallons per day

To accommodate wastewater generated by additional on-site residents, the Project would include the installation of a new sanitary sewer mainline on-site and could require replacement of an approximately 1,000-foot segment of existing six-inch sanitary sewer pipe in the Jamison Way right-of-way. The new sanitary sewer pipe would be installed in a segment of the right-of-way previously excavated for the existing pipe and would not result in secondary impacts on biological resources, cultural resources, or other environmental resources. Therefore, the impact of the Project related to wastewater treatment facilities and standards would be less than significant.

NO: LESS THAN SIGNIFICANT

18c. Stormwater Drainage Facilities

The Alameda County Flood Control and Water Conservation District (ACFCD) provides stormwater collection and conveyance services to the Project site, and owns and manages most storm drains in Castro Valley. The Project site is located in ACFCD's Flood Control Zone 2, which contains 55 miles of natural creek, four miles of earth channels, 11 miles of concrete channels, 49 miles of underground pipes, two miles of improved creeks, and two pump stations (Alameda County 2012). Stormwater flows from Lake Chabot and Castro Valley Creek to storm drains, channels, and pipelines leading to San Lorenzo Creek and to the San Francisco Bay.

As discussed in Section 9, *Hydrology and Water Quality*, the proposed construction of a bio-retention basin and ancillary bio-retention cells in accordance with the Alameda County C.3 Stormwater Technical Guidance would detain stormwater runoff from the Project site, decreasing flow into the existing stormwater drainage system within ACFCD's Zone 2. Therefore, the Project would not generate substantial additional runoff that exceeds the capacity of existing stormwater drainage facilities and would not result in the need for construction of new facilities. The impact related to stormwater drainage facilities would be less than significant.

NO: LESS THAN SIGNIFICANT

18d. Water Supply

The Project site is located within the service area of the East Bay Municipal Utilities District (EBMUD), which provides water service to approximately 1.4 million customers throughout Alameda and Contra Costa counties. EBMUD's customers have decreased water usage by 20 percent since 2006 due to extreme drought conditions throughout the State (Taylor 2016). Efforts to curtail water use through programs supported by EBMUD, the implementation of a temporary drought surcharge (enforced in 2015), and change in consumer behaviors were largely responsible for the decrease in water use, and similar water reduction measures are expected to remain in place as outlined in EBMUD's 2015 Urban

Water Management Plan (UWMP) in order to better manage water demands and reduce risks during drought and emergency conditions (EBMUD 2016). Although current weather conditions (2015-2016 and 2016-2017 winter storm seasons) have been wetter and unlike the prior drought years, climate change and other weather patterns indicate the region is likely to encounter drought years again in the near future and remain subject to water use limitations.

Annual water demand was approximately 232 mgd for the EBMUD service area in 2015, for an average consumption rate of 165 gallons per day per person (EBMUD 2016). In the years 2030 and 2040, annual water demand is expected to increase to 290 mgd and 312 mgd, respectively. EBMUD is projecting population growth within its service area to reach 1.7 million in 2040 (EBMUD 2016). Based on EBMUD's assessment of climate change impacts to service and operations, water demand is estimated to increase by 10 mgd if average temperature in the service area increases by 4°C. In order to meet projected needs, EBMUD has set ambitious goals for recycled water programs to deliver up to 20 mgd and for conservation projects to achieve water savings up to 62 mgd by 2040.

Based on EBMUD's average consumption rate of 165 gallons per day per person in 2015, a net increase of 53 new residents to the Project site would add approximately 8,745 gallons per day in water consumption, which is approximately 0.004 percent of total daily water consumption within the service area. In the event of multiple dry years, EBMUD's rationing would further decrease residential water consumption from the Project site (Table 4-5 *Preliminary EBMUD Baseline Supply and Demand Analysis* for multi-year droughts in the 2015 UWMP), based on its reduction goal of 6 percent of annual water supply for a single dry year or first year of a multi-year drought scenario and subsequent 20 percent reduction in annual water supply for additional dry years (EBMUD 2016). Therefore, the Project would not substantially increase water demand and sufficient water supplies would be available to serve the Project. Impacts related to water supplies would be less than significant.

NO: LESS THAN SIGNIFICANT

18f, g. Solid Waste

The Castro Valley Sanitary District (CVSan) provides solid waste direct collection services for the Project area. Solid waste collected in Alameda County is disposed of at two active landfills: the Altamont Landfill Resource Recovery Facility and the Vasco Road Sanitary Landfill (Alameda County Waste Management Authority 2015). Altamont currently receives municipal solid wastes from twelve Alameda County jurisdictions, including Castro Valley and the Project site. As of January 2013, the Altamont Landfill had 40 million tons of municipal solid waste capacity out of the total 87 million permitted. This represents approximately 34 years of remaining capacity at the current rate of fill, minus San Francisco waste as of 2015, with an expected closure date of 2049.

The estimated net increase of 53 residents on-site would generate approximately 35 additional tons of solid waste per year, based on CVSan's average annual residential solid waste disposal rate of 0.66 tons per capita. This additional solid waste would represent a miniscule fraction of the total capacity of Altamont Landfill's permitted capacity of 1.6 million tons per year. Furthermore, the Project would divert the majority of its solid waste in compliance with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance of 2012, whereby multi-family properties with five or more units must sort recyclables from trash. Multi-family properties also must sort compostables from trash. CVSan transfers all recyclable, compostable, organics, and construction & demolition debris to Davis Street Transfer Station (DSTS). In 2014, DSTS had a diversion rate of 76 percent (Alameda County Waste Management Authority 2015). Therefore, the Project would have a less than significant impact related to solid waste.

NO: LESS THAN SIGNIFICANT IMPACT

| 19. | MANDATORY FINDINGS OF SIGNIFICANCE | YES: Potentially Significant Impact | NO: Less Than Significant With Mitigation | NO: Less Than Significant Impact | NO: No Impact |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------|-------------------------------------|---------------|
| a) | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | × | | |
| b) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | | × | | |
| c) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | x | | |

19a. Environmental Quality

As discussed in Section 4, *Biological Resources*, construction of the Project could adversely affect nesting birds and roosting bats. However, implementation of mitigation measures BIO-1 and BIO-2 would reduce this impact on wildlife species to less than significant with pre-construction surveys and avoidance of wildlife if present. The Project would have no other adverse effects on the quality of the environment, habitat of fish or wildlife species, fish or wildlife populations, plant or animal communities, or rare or endangered plants or animals. As discussed in Section 5, *Cultural Resources*, the Project would not affect historical resources. Therefore, impacts would be less than significant with mitigation incorporated.

NO: LESS THAN SIGNFICANT IMPACT WITH MITIGATION

19b. Cumulative Impacts

As discussed in Section 3, *Air Quality*, construction of the Project would generate NO_x emissions exceeding BAAQMD thresholds, contributing to regional pollution in the San Francisco Bay Area Air Basin. However, implementation of Mitigation Measure AQ-1 to limit the frequency of truck trips transporting contaminated soil offsite would reduce NO_x to less-than-significant levels. As discussed in Section 16, *Transportation*, Project-generated trips would not substantially contribute to existing exceedances of criteria for traffic congestion. Therefore, the Project would have less than significant cumulative impacts with mitigation incorporated.

NO: LESS THAN SIGNFICANT IMPACT WITH MITIGATION

19c. Substantial Adverse Effects

As discussed in item 19b, the Project would have less than significant effect on regional air quality with implementation of Mitigation Measure AQ-1 to limit NO_x emissions. Mitigation measures GEO-1 and GEO-2 to remove existing fill material and address expansive soils if necessary also would ensure that new residents are not exposed to hazards from soil instability. As discussed in Section 9, *Hazards and Hazardous Materials*, disturbance of soil during grading could expose people to contaminants from

historic agricultural activity on-site; however, implementation of Mitigation Measure HAZ-1 to further delineate the extent of contamination and excavate all contaminated soil would reduce this hazard to human health to a less-than-significant level. In addition, the generation of noise and vibration from construction activity, as discussed in Section 12, would be reduced to a level that is less than significant by the implementation of Mitigation Measures N-1 and N-2. Therefore, the Project would not have substantial direct or indirect adverse effects on human beings with incorporation of mitigation measures.

NO: LESS THAN SIGNFICANT IMPACT WITH MITIGATION

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E. SOURCES

Alameda County. 1996. Alameda County General Plan Scenic Route Element. May 1966, amended May 1994. Available at: http://acgov.org/cda/planning/generalplans/documents/Scenic_Route_Element_ General_Plan_1966.pdf

____. 2008. Alameda County Landmarks & Contributing Buildings Identified in 2005-2008 Comprehensive Survey. Available at:

https://www.acgov.org/cda/planning/landuseprojects/documents/phrcList.pdf. Accessed December 2016.

____. 2012. Castro Valley General Plan. March 1, 2012. Available at: https://www.acgov.org/cda/planning/generalplans/documents/CastroValleyGeneralPlan_2012_FINA L.pdf.

____. 2014. Community Climate Action Plan (CCAP). February 4, 2014. Available at: http://www.acgov.org/cda/planning/generalplans/documents/110603_Alameda_CCAP_Final.pdf

_____. 2014. Residential Design Standards and Guidelines for the Unincorporated Communities of West Alameda County, Chapter 3-Design Guidelines for Residential Projects. Adopted October 2014. Available at: https://www.acgov.org/cda/planning/documents/2014ResidentialDesignGuidelines-complete.pdf.

____. 2015. Ashland Cherryland Business District Specific Plan. December 2015. Available at: http://www.acgov.org/cda/planning/generalplans/documents/LWC_ACBD_Adopted_SP-Code_Dec2015.pdf

_____. 2016. Alameda County General Ordinance Code. https://www.municode.com/library/ca/alameda_county/codes/code_of_ordinances. Accessed January 2017.

____. 2016. California Airport Land Use Commissions (ALUC). https://www.acgov.org/cda/planning/generalplans/airportlandplans.htm. Accessed December 2016.

____. 2016. Staff Report – Preliminary Review: Site Development Review & Tract Map, PLN2016-00056. November 28, 2016.

Alameda County Fire Department. 2016. Alameda County Fire Department: Fire Stations / Facilities. https://www.acgov.org/fire/about/stations.htm. Accessed January 2017.

Alameda County Library. 2016. Alameda County Library: Castro Valley Library. http://www.aclibrary.org/castro_valley. Accessed January 2017.

Alameda County Transit. 2017. Transit Information: Castro Valley Station, Map. Available at: http://www.actransit.org/wp-content/uploads/HSP_CAST-routes.pdf

Alameda County Waste Management Authority. 2015. Countywide Inegrated Waste Management Plan. March 2015. Available at: http://www.stopwaste.org/resource/reports/countywide-integrated-wastemanagement-plan-coiwmp. Accessed January 2017.

Association of Bay Area Governments (ABAG). 2013. Plan Bay Area: Strategy for a Sustainable Region. Available at: http://files.mtc.ca.gov/pdf/Plan_Bay_Area_FINAL/Plan_Bay_Area.pdf. Accessed January 2017. Bay Area Air Quality Management District. 1998. Regulation 11, Hazardous Pollutants, Rule 2, Asbestos Demolition, Renovation and Manufacturing. October 1998. Available at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Rules%20and%20Regs/reg%2 011/rg1102.ashx.

____. 2010. Bay Area 2010 Clean Air Plan. San Francisco, CA. September 15, 2010. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2010-clean-air-plan/cap-volume-i-appendices.pdf.

____. 2011. California Environmental Quality Act Air Quality Guidelines. May 2011. Available at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA %20Guidelines%20May%202011.ashx?la=en. Accessed January 2017.

___. 2012. Updated CEQA Guidelines. May 2012. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/baaqmd-ceqaguidelines_final_may-2012.pdf?la=en

_____. 2014. Air Quality Standards and Attainment Status. August 20, 2014. Available at: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. Accessed January 2017.

- Bay Area Native Sites. 2017. ALA-60 at Crow Canyon Road and Castro Valley Boulevard. Available at: http://bayareanativesites.com/native-sites/ala-60-at-crow-canyon-road-and-castro-valley-boulevard/. Accessed February 2017.
- Bay Area Transit. 2016. Transit Routes, Transit Information, Castro Valley Station. Available at: http://www.actransit.org/wp-content/uploads/HSP_CAST-routes.pdf.
- California Air Pollution Control Officers Association (CAPCOA). 2008. CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA). January 2008.

____. 2010. Quantifying Greenhouse Gas Mitigation Measures. August 2010.

- _____. 2016. CalEEMod User's Guide 2016. Available at: http://www.aqmd.gov/caleemod/user's-guide. Accessed January 2017.
- California Climate Action Registry (CCAR). California Climate Action Registry General Reporting Protocol, Version 3.1. January 2009.

California Department of Conservation (DOC). 2014. California Important Farmland Finder, Interactive Map. Available at: http://maps.conservation.ca.gov/ciff/ciff.html. (accessed December 2016).

- California Department of Fish and Wildlife (CDFW). 2016. California Natural Diversity Database (CNDDB) Rarefind 5. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed December 12, 2016.
- California Department of Finance. 2016. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2016, with 2010 Benchmark. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/. Accessed January 2017.
- California Department of Toxic Substances Control (DTSC) Cortese List. 2007. Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed February 2017.
 - . EnviroStor. 2017. Available at: http://www.envirostor.dtsc.ca.gov. Accessed February 2017.

- California Department of Transportation (Caltrans). 2016. List of Eligible and Officially Designated State Scenic Highways. Available at: http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html. Accessed December 2016.
- California Energy Commission (CEC). 2006. Refining Estimates of Water-Related Energy Use in California. Prepared by Navigant Consulting, Inc. December 2006.
 - _____. 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. March 2009.
- California Environmental Protection Agency (CalEPA). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. Available at: https://www.arb.ca.gov/ch/handbook.pdf
- California Fire Department (Cal Fire). Very High Fire Hazard Severity Zones in Alameda County. 2008. Available at: http://frap.fire.ca.gov/webdata/maps/alameda/fhszl_map.1.pdf. Accessed February 2017.
- California Geological Survey and United States Geological Survey (CGS and USGS). 2008. Earthquake Shaking Potential for California, Map Sheet 48. Available at: http://www.conservation.ca.gov/cgs/information/publications/ms/documents/ms48_revised.pdf. Accessed December 2016.
- California Native Plant Society (CNPS). Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: http://www.rareplants.cnps.org. Accessed December 12, 2016.
- California State Water Resources Control Board (SWRCB). 2015. GeoTracker Database. Available at: https://geotracker.waterboards.ca.gov/. Accessed December 2016.
 - _____. 2016. Impaired Water Bodies. May 2016. Available at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml
- _____. 2017. Construction Storm Water Program. http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml. Accessed January 2017.
- CalRecycle. CALGreen Construction Waste Management Requirements Summary. September 7, 2016. Available at:

http://www.calrecycle.ca.gov/LGCentral/Library/CandDModel/Instruction/CALGreenTbl.pdf.

Clean Water Program. 2016. C.3 Stormwater Technical Guidance: A Handbook for Developers, Buildings and Project Applicants. May 2016. Available at: http://www.cleanwaterprogram.org/uploads/C.3_Tech_Guidance_v5.1_FINAL_May_2016%20(low %20res).pdf. Accessed January 2017.

DeLaRive, Paula, Castro Valley Unified School District. Personal communication. January 13, 2017.

- Dibblee, T.W., and J.A. Minch. 2005. Geological Map of the Hayward Quadrangle, Contra Costa and Alameda Counties, California. Available at: https://ngmdb.usgs.gov/Prodesc/proddesc_73801.htm. Accessed February 2017.
- DiTomaso, Joseph M. and Evelyn A. Healy. 2007. Weeds of California and Other Western States. Regents of the University of California. University of California, Division of Agriculture and Natural Resources Publication 3488.

- East Bay Municipal Utility District. 2016. Urban Water Management Plan 2015. Available at: http://www.ebmud.com/water-and-drought/about-your-water/water-supply/urban-water-managementplan. Accessed January 2017.
- ENGEO Inc. 2016. Preliminary Geotechnical Exploration, Jamison Way Parcels, Castro Valley, California. Project No. 12854.000.000. Prepared for Catalyst Development Partners. March 21, 2016.
- Federal Emergency Management Agency (FEMA). FEMA Flood Map Service Center. Available at: https://msc.fema.gov. Accessed January 2017.
- Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment. May 2006.
- Holmes, Lisa. 2017. State Water Resources Control Board. Email communication. April 20, 2017.
- Kearney Foundation of Soil Science. 1996. Background Concentration of Trace and Major Elements in California Soils. Available at: https://envisci.ucr.edu/downloads/chang/kearney_special_report_1996.pdf. March 1996.
- Metropolitan Transportation Commission (MTC). 2013. Plan Bay Area 2013. Available at: http://planbayarea.org/the-plan/Document-Archive-2013-PBA.html. Accessed January 2017.
- National Park Service. 2014. National Register of Historic Places, Interactive Map. Available at: https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466. Accessed February 2017.
- Preservation Architecture. 2016. 3528-3550 Jamison Way, Castro Valley Historic Resources Evaluation, DRAFT. December 8, 2016.
- San Francisco Bay Regional Water Quality Control Board. 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049 / NPDES Permit No. CAS612008. November 2015. Available at: http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/stormwater/Municipal/R2-2015-0049.pdf. Accessed January 2017.
- Southern California Air Quality Management District (SCAQMD). 1993. Figure 5-5, Land Uses Associated with Odor Complaints, in SCAQMD CEQA Air Quality Handbook.
- Taylor, Tracey. "EBMUD suspends drought restrictions as East Bay exceeds water conservation goals." Published May 24, 2016. http://www.berkeleyside.com/2016/05/24/ebmud-suspends-drought-restrictions-as-east-bay-exceeds-water-conservation-goals/. Accessed January 2017.
- Terra, Bonnie, Alameda County Fire Department. Personal communication. January 18, 2017.
- University of California, Davis. 2016. California Soils Resources. Available at: https://casoilresource.lawr.ucdavis.edu/gmap. Accessed on December 12, 2016.
- U.S. Census Bureau. 2015. Available at: http://www.census.gov/quickfacts. Accessed January 2017.
- U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. 2016. Available at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed on December 12, 2016.
- U.S. Environmental Protection Agency (U.S. EPA). 2009. Frequently Asked Questions about Global Warming and Climate Change: Back to Basics. April 2009. Available at: https://www3.epa.gov/climatechange/Downloads/ghgemissions/Climate_Basics.pdf

- _____. 2016a. *Lead: Real Estate Disclosure*. Available at: http://www2.epa.gov/lead/real-estate-disclosure. Accessed February 6, 2017.
- _____. 2016b. *Asbestos*. February 2015. Available at: http://www2.epa.gov/asbestos/learn-about-asbestos#asbestos. Accessed January 29, 2016.
- _____. 2017. Criteria Pollutants. Available at: https://www.epa.gov/criteria-air-pollutants. Accessed January 2017.
- U.S. Fish and Wildlife Service (USFWS). 2016. National Wetlands Inventory. Version 2. Available at: https://www.fws.gov/wetlands/Data/Mapper.html. Accessed on December 12, 2016.
- U.S. Geological Survey (USGS). 2016. National Hydrography Dataset. Last modified on 29 September 2016. Available at: https://viewer.nationalmap.gov/viewer/nhd.html?p=nhd. Accessed on December 12, 2016.

F. MITIGATION MEASURES TO BE INCLUDED IN THE PROJECT AND AGREED TO BY THE PROJECT SPONSOR AND ALL SUBSEQUENT PROPERTY OWNERS AND PERMITTEES

The following mitigation measures are required to reduce potentially significant impacts of the proposed project to a "Less Than Significant" or "No Impact" level. These mitigation measures shall be made conditions of approval for the Project. For every mitigation measure, the Permittee will be responsible for implementation actions, schedule, funding and compliance with performance standards, unless otherwise stated in the measure.

- AQ-1 Hauling Trip Cap. During the Project's grading phase, no more than 38 hauling trips (round trip) for offsite disposal of excavated soil shall occur per day.
- **B-1** Nesting Bird Surveys and Avoidance. Initial site disturbance activities, including vegetation removal and structure demolition, shall be prohibited during the general avian nesting season (February 1 – August 30), if feasible. If breeding season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 30 and February 1.
- **B-2** Roosting Bats Impact Avoidance and Minimization. The applicant shall ensure the following actions are undertaken to avoid and minimize potential impacts to roosting bats:
 - Prior to construction activities, a qualified biologist shall conduct a survey of existing structures proposed for demolition and trees proposed for removal or trimming within the Project site to determine if roosting bats are present. The survey shall be conducted during the non-breeding season (November through March) to the maximum extent feasible to allow for passive relocation of non-maternity roosting bats, if needed. The biologist shall have access to all interior attics, as needed. If a colony of bats is found roosting in any structure, further surveys shall be conducted sufficient to determine the species present and the type of roost (day, night, maternity, etc.). If the bats are not part of an active maternity colony, passive exclusion measures shall be implemented. A passive exclusion plan must be submitted and approved by Alameda County, in close coordination with CDFW, prior to implementation. Exclusion measures may include one-way valves that allow bats to exit

the structure but are designed so that the bats may not re-enter the structure.

- Prior to removal of any trees or structures, a survey shall be conducted by a qualified biologist to determine if any structures proposed for removal or trees proposed for removal or trimming harbor maternal bat colonies. If a non-maternal roost is found, the qualified biologist, in close coordination with CDFW shall install one-way valves or other appropriate passive relocation method. Maternal bat colonies may not be disturbed. When the typical maternity season ends, a biologist shall confirm that the young have matured and the maternity colony is no longer active. At that point, passive exclusion measures may be implemented. A passive exclusion plan must be submitted and approved by Alameda County, in close coordination with CDFW, prior to implementation. Exclusion measures may include one-way valves that allow bats to exit the structure but are designed so that the bats may not re-enter the structure. In the event that a maternity colony is present, other measures to avoid impacts to bats may necessary as determined by the County in consultation with CDFW.
- **CR-1 Unanticipated Discovery of Cultural Resources.** If unanticipated cultural deposits are encountered during any phase of Project construction or land modification activities, work shall stop within 50 feet of the discovery, the County shall be notified, and a professional archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology shall be retained to assess the nature, extent, and potential significance of the discovery. If the resources are determined to be Native American in origin, the applicant shall consult with the County to begin Native American consultation procedures, as appropriate. If the discovery is determined to be not significant, work will be permitted to continue in the area.

Potentially significant resources may require a Phase II subsurface testing program to determine the resource boundaries within the Project site, assess the integrity of the resource, and evaluate the site's significance through a study of its features and artifacts. If, in consultation with the County, a discovery is determined to be significant, a mitigation plan shall be prepared and implemented in accordance with state guidelines. If impacts to the resource cannot be avoided, a data recovery plan shall be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort shall be curated at a qualified facility.

CR-2 Human Remains Recovery Procedures. If human remains are discovered, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner will notify the NAHC. The NAHC will determine and notify a Native American most likely descendant (MLD). The MLD will complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

- **GEO-1 Existing Fill Removal**. As recommended in the Preliminary Geotechnical Exploration prepared by ENGEO for the Project, the applicant shall completely remove existing fill down to native soil. The native soil shall be scarified and moisture conditioned before being covered with new engineered fill. These recommendations shall be included in final grading and building plans submitted for County review and approval.
- **GEO-2 Expansive Soil Mitigation**. As recommended in the Preliminary Geotechnical Exploration prepared by ENGEO for the Project, the applicant shall evaluate the expansion potential of the property soils at the time of design-level study and mitigate expansive soils through appropriate foundation design and during grading activities as recommended in the design-level study. Mitigation may include the use of a mat foundation, incorporating fill specifications tailored to the on-site soil expansiveness, and keeping exposed soils moist by occasional sprinkling during grading.
- H-1 Address Off-Site Run On. Prior to obtaining a building permit, the Project applicant shall prepare and submit for County approval a drainage plan that addresses low-flow run on from adjacent properties by entering into an agreement with the adjacent property owner(s) to redirect stormwater before it enters the property, or collect and treat such stormwater flows within the on-site bio-retention cells prior to discharge. High flows from on-site or other properties may be bypassed to the roadway to prevent erosion or damage to treatment facilities.
- HAZ-1 Soil Testing and Disposal. Prior to obtaining a grading permit, the applicant shall retain a qualified environmental site assessor to conduct additional soil samples on the Project site that step outward from the sampling locations reported in ENGEO's April 2016 Agricultural Chemical Impact Assessment. These soil samples shall be sufficient to completely delineate the vertical and lateral extent of concentrations of arsenic and organochlorine pesticides that exceed the latest Residential Regional Screening Levels (RSLs) provided by the U.S. Environmental Protection Agency's Region 9. The volume of soil with contaminants that exceeds their respective RSLs shall be disposed of at a facility licensed to receive Class II California Hazardous Waste, such that remaining soil on-site does not exceed RSLs.
- **N-1. Best Management Practices to Assure Acceptable Vibration Levels.** The following mitigation shall be implemented by Project construction crews to avoid structural damage due to construction vibration and to reduce the perceptibility of vibration levels at nearby sensitive land uses:
 - Minimize or avoid using clam shovel drops, vibratory rollers, and tampers near the shared property lines of the adjacent land uses.
 - When vibration-sensitive structures are within 25 feet of the site, survey condition of existing structures and, when necessary, perform site-specific vibration measurements to direct construction activities. Contractors shall continue to monitor effects of construction activities on surveyed sensitive structures and offer repair or compensation for damage.
 - Construction management plans shall include predefined vibration reduction measures, notification of scheduled construction activities requirements for properties adjoining the site, and contact information for on-site coordination and complaints.

- **N-2.** Best Management Practices to Reduce Construction Noise Levels. The following mitigation shall be implemented to reduce construction noise emanating from the Project site to the surrounding sensitive land uses:
 - Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
 - Unnecessary idling of internal combustion engines should be strictly prohibited.
 - Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
 - Erect temporary noise control blanket barriers, if necessary, along building façades facing construction sites. Noise control blanket barriers can be rented and quickly erected.
 - Utilize "quiet" air compressors and other stationary noise sources where technology exists.
 - Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the Project site.
 - The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
 - Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.
- **T-1** No Parking Zones. The Applicant shall coordinate with the County Public Works Agency to have 20 feet of red curb No Parking Zones painted on either side of the Project driveway. The Applicant shall be responsible for the cost of such an installation, and the County Public Works Agency would provide for its maintenance.
- **T-2** Sidewalk Improvements on Jamison Way. The applicant shall coordinate with the County Public Works Agency to install or wholly fund sidewalk and curb improvements where they are absent east of the Project site on the north side of Jamison Way, and on the west side of Redwood Road south of Jamison Way.
- **TCR-1** Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, Alameda County shall consult with a qualified archaeologist and begin or continue Native American consultation procedures. If Alameda County determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance

with state guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

G. AGREEMENT BY PROJECT SPONSOR

Project Sponsor, acting on behalf of all present and future property owners and Permittees, understands the mitigation measures set forth above and agrees to be bound by them if they are adopted as a result of project approval. Monitoring reports shall be provided to the Planning Director and Director of Public Works at appropriate stages in the development process.

Jon Char

Project Sponsor's Signature

April 26, 2017

Date

Todd A. Deutscher, Manager

Project Sponsor's Printed Name and Title