SAN MATEO LOCAL AGENCY FORMATION COMMISSION (LAFCo)

NOTICE OF INTENT TO ADOPT
NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: Annexation to West Bay Sanitary District, when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: 14-14

OWNER: Christopher and Kimberly Leach

APPLICANT: Bradford Bosch, B.D. Bosch & Associates, LLC

ASSESSOR'S PARCEL No.: 080-233-040

LOCATION: Vista Verde Way, Unincorporated San Mateo County

PROJECT DESCRIPTION

Assessor Parcel Number 080-233-040, on Vista Verde Way, is proposed to be annexed to West Bay Sanitary District (WBSD) and served by a sewer main extension. Vista Verde Way (no address assigned to undeveloped parcel proposed for annexation) and parcels that may be served by sewer line extension, in a community known as "Los Trancos Woods" in unincorporated San Mateo County, CA. The nearest cross streets are Los Trancos Road and Ramona Road.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

San Mateo LAFCo has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

1. The project will not adversely affect water or air quality or increase noise levels substantially.

2. The project will not have adverse impacts on the flora or fauna of the area.

3. The project will not degrade the aesthetic quality of the area.

4. The project will not have adverse impacts on traffic or land use.

5. In addition, the project will not:

    a. Create impacts which have the potential to degrade the quality of the environment.

b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.

c. Create impacts for a project which are individually limited, but cumulatively considerable.

d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project to avoid potentially significant effects:

Mitigation Measure III.a. BAAQMD Required Dust Control Measures: The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publically visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure IV.1. The swale between 1260 Los Trancos Road and 281 Vista Verde Way shall be avoided. If it is necessary to cross the swale, a wetland delineation shall be required to evaluate whether it is under the jurisdiction of federal or state agencies, and any appropriate permits shall be obtained. Best Management Practices shall be implemented if there is potential for erosion and sedimentation effects.

Mitigation Measure IV.2. Lateral pipelines shall be sited to avoid damage to or losses of trees protected by the San Mateo County tree protection ordinances. Where damage or loss is unavoidable, county permits shall be obtained. Any impacts would be fully mitigated as a result.

Mitigation Measure V.1.

- Per WBSD Standard Conditions of Approval, if archaeological materials are uncovered during earthwork or trenching, work shall be stopped within 100 feet of the materials until a professional archaeologist certified by the Society of California Archaeology or the Society of Professional Archaeology has evaluated the significance of the find. If significant, a mitigation program shall be prepared including collection and analysis of materials prior to the resumption of grading. The program shall include duration of materials at a recognized storage facility. The program shall be developed and implemented under the direction of the San Mateo County Planning and Building Department.
- If evidence of prehistoric cultural resources (i.e., artifacts, concentrations of shell/bone/rock/ash) is encountered during construction, the Contractor shall contact the County of San Mateo to determine the value of the resources and, if necessary, implement a recovery program.

Mitigation Measure V.2. If any human skeletal remains are encountered during trenching for the sewer lines, all activity in the immediate vicinity of the discovery shall be halted and appropriate measures, as required by the County of San Mateo, would be followed.

Mitigation Measure XI.a.

- Construction activities, including truck access for materials deliveries, shall not occur from 6 p.m. to 7 a.m. on weekdays, 5 pm to 9 am on Saturdays, and all day Sunday, Thanksgiving, and Christmas, except in an emergency.
- All equipment shall be equipped with properly operating mufflers.
- Staging area shall be selected as far from occupied homes as is practical.
- Nocturnal emergency or safety operation of stationary pumps, motors, generators, etc. within 50 feet of a residence will utilize temporary electric line power, or the engine shall be shielded from line of sight to the residence by a temporary barrier.

Mitigation Measure XV.e. Potential short-term impacts related to inadequate emergency access during construction would be mitigated to less than significant levels with implementation of the following measures:

- Per WBSD requirements, a Traffic Control Plan which outlines all potential lane closures and detours, as necessary, shall be prepared.
- Appropriate signage shall be utilized during construction to warn pedestrians, bicyclists and vehicles of any potential traffic hazards;
- One lane for through traffic shall be maintained to allow access for all project area residents during construction.

RESPONSIBLE AGENCY CONSULTATION

- West Bay Sanitary District
- County of San Mateo Planning Department

INITIAL STUDY

San Mateo LAFCo has reviewed the Environmental Evaluation of this project and has found that the probable environmental impacts are insignificant. A copy of the initial study is attached.

REVIEW PERIOD: June 10, 2015 to July 10, 2015

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by San Mateo LAFCo, 455 County Center, 2nd Floor, Redwood City, CA 94063 no later than **5:00 p.m., Friday, July 10, 2015**.

CONTACT PERSON

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www.sanmateolafcol.org

Martha Poyatos, Executive Officer

DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

VISTA VERDE WAY
ANNEXATION TO WEST BAY SANITARY DISTRICT AND SEWER LINE EXTENSION

LAFCo File No. 14-14 (APN 080-233-040)

PREPARED FOR:

San Mateo Local Agency Formation Commission
455 County Center, 2nd Floor
Redwood City, CA 94063-1663

PREPARED BY:

Grassetti Environmental Consulting
7008 Bristol Drive
Berkeley, CA 94705

May 2015

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INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared pursuant to the California Environmental Quality Act of 1970 (CEQA), as amended, (commencing with Section 21000 of California's Public Resources Code), and State CEQA Guidelines. The Lead Agency for the project, as defined by CEQA, is the San Mateo County Local Agency Formation Commission (LAFCo), which is the agency that has received an application for annexation of the subject property to the West Bay Sanitary District (WBSD). San Mateo LAFCo has primary jurisdiction over the boundaries of WBSD. San Mateo LAFCo consideration and potential approval of the annexation is the first action by a public agency prior to extension of sewer service to the subject property. The proposed annexation is also subject to WBSD approval. WBSD is a Responsible Agency under CEQA, and will use this Initial Study in its consideration of the proposed action.

The San Mateo LAFCo has determined that the proposed project is subject to environmental review under CEQA. Early identification of potential environmental impacts provides the basis for necessary revisions to the project design. Thus, this document concentrates on aspects of the project that are likely to have a significant effect on the environment, and identifies feasible measures to mitigate (*i.e.* reduce or avoid) these impacts. The CEQA Guidelines define "significant effect on the environment" as a "substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project…." (CEQA Guidelines, Section 15382).

This Initial Study consists of the following major sections:

- Project Description – provides a brief description of existing site conditions and facilities, the proposed modifications and improvements, and the discretionary approvals required for the project to proceed.

- Environmental Checklist and Discussion – provides specific environmental topic chapters within which the following are addressed:

    1) Environmental setting or conditions that may affect or be affected by the project.
    2) Potential environmental effects and level of significance likely to result from the project as proposed.
    3) Mitigation measures that can be implemented to eliminate or substantially reduce the identified potentially significant environmental effects.
    4) References used in the analyses.

- Appendices – including relevant air quality information and biological report.

INITIAL STUDY / DRAFT MITIGATED NEGATIVE DECLARATION
pursuant to the California Environmental Quality Act, as amended

A. PROJECT DESCRIPTION

1. Project title: Vista Verde Way Annexation to West Bay Sanitary District and Sewer Line Extension. LAFCo File No. 14-14 (APN 080-233-040)

2. Lead agency name & address: San Mateo Local Agency Formation Commission (LAFCo)
455 County Center, 2nd Floor
Redwood City, CA 94063-1663

3. Contact person & phone number: Martha Poyatos. Executive Officer, (650) 363-4224

4. Project location: Vista Verde Way (no number assigned to undeveloped parcel proposed for annexation) and parcels that may be served by sewer line extension, in a community known as "Los Trancos Woods" in unincorporated San Mateo County, CA. The nearest cross streets are Los Trancos Road and Ramona Road. Assessor Parcel Number: 080-233-040, on Vista Verde Road, is proposed to be annexed to WBSD. The 11 other parcels (See Table 1) included in the assessment are not proposed for annexation. (See Figure 1, Project Location)

5. Project sponsor's name & address: Bradford Bosch
B. D. Bosch & Associates, LLC (Owner's Representative)
P.O. Box 89
Palo Alto, CA 94302-0089

6. General plan designation: Low Density Residential

7. Zoning: Property to be annexed: single-family residential (R-E/S-11). Other properties that may connect to the sewer line: single-family residential (R-1/S-108, R-1/S-83, R-E/S-11 and R-1/S-83 Combining District – Los Trancos Woods)

8. Description of project:

Project Objectives
The objectives of the annexation are to provide reliable sanitary sewer service to the project lots, and to remove the chance of septic system failure and resultant seepage of sewage from project area septic systems into Los Trancos Creek or its tributaries.

Existing septic systems in the project area have been determined in the past to be failing due to high groundwater in the vicinity (WBSD 2001). In addition, steep slopes constrain additional septic system development. The proposed service area annexation is intended to allow installation of a sanitary sewer system that would allow abandonment of the existing septic systems and thereby eliminate potential health and water quality risk.

Proposed Annexation and Sewer Service Potential

The proposed project is to annex a 1.174-acre property to the West Bay Sanitary District's (WBSD) Service Area, in the unincorporated Los Trancos Woods area of San Mateo County (see Figure 1, Project Location). A sewer line would be extended approximately 900 feet from Los Trancos Road to the annexation parcel in Vista Verde Way. The proposed sewer line extension also has the potential to serve eleven additional adjacent parcels currently not proposed for annexation. In this document the 1.174-acre property is referred to as the **annexation site**, while the entire area where the pipeline would be extended, including the adjacent parcels, is referred to as the **project area**.

This Initial Study/Mitigated Negative Declaration (IS/MND) addresses site-specific impacts from providing WBSD sewer service to the parcel proposed for annexation, including placing the sewer line in Los Trancos Road and Vista Verde Way and a laterals to the annexation site in addition to the 11 parcels not currently proposed for annexation, but which are included in the project area. No residential development is proposed as part of this sewer line extension project. The annexation site was included in the biology section field survey, but evaluation of construction impacts for a residence was not included, or consistency with zoning setbacks. Because there are no plans for the other properties, this IS/MND does not assess site-specific impacts for development on the eleven other parcels that are not currently proposed for annexation but could be served in the future by the extended sewer line. Any development proposed within the project area would be subject to separate review and approval by San Mateo County staff.

The parcel proposed for annexation and one of the other 11 parcels in the project area are vacant, while the remaining 10 parcels are already developed. All developed parcels in the project area are served by existing septic systems, and are within the WBSD Sphere of Influence (SOI). Project area parcel numbers, parcel size, development status are shown on Figure 2, and listed on Table 1.

Based on information provided by the San Mateo County Planning Department (S. Rosen and D. Holbrook, Pers. Communication with San Mateo LAFCo, 2015), the highest density estimate for additional development within the project area shown in Figure 2 are 5 primary and 12 secondary units (for a total of 17 new units). This estimate is based on the zoning designations, number of vacant lots; assessor's parcels with more than one lot that is developable; lots that could be further subdivided; and potential for secondary units. The number of secondary units is dependent upon site-specific constraints such as slope, and the size of secondary units is limited by the total floor area ratio. Because of site geotechnical constraints and possible water supply limitations, the number of units that could be developed in the project area likely would be lower than this estimate.

Potential cumulative and growth-inducing effects that could result from extension of sewer lines to the subject properties are discussed in response to that question in the Initial Study Checklist. This document examines the direct and reasonably foreseeable indirect environmental impacts of providing sewer service to these 12 parcels, including construction of all sewer lines and laterals, as well as wastewater generation.

Table 1: Sizes and Development Status of Parcels that Could Be Served by the Proposed Sewer Line Extension

Property Number	Assessor's Parcel Number	Address	Zoning Designation Minimum Parcel Size	Parcel Size (Square Feet)	Existing House Size (Sq. Ft.) or Vacant	Potential Subdivision
1	080-060-080	184 Bonita Street	R-1/S-108 20,000	26,570	2,860	No
2	080-060-110	No address	R-1/S-108 20,000	12,441	Vacant	No
3	080-060-120	1260 Los Trancos Road	R-1/S-108 20,000	28,310	1,370	No
4	080-060-380	281 Vista Verde Way	R-E/S-11 One acre	65,780	1,130	No
5	080-233-020	271 Vista Verde Way	R-E/S-11 One acre	81,020	3,180	No
6	080-233-030	261 Vista Verde Way	R-E/S-11 One acre	45,300	2,415	No
7*	**080-233-040**	**No address**	**R-E/S-11 One acre**	**50,965**	**Vacant**	**No**
8	080-093-040	1247 Los Trancos Road	R-1/S-83 7,500	19,170	1,320	Yes, 2
9	080-093-030	1255 Los Trancos Road	R-1/S-83 7,500	19,170	2,590	Yes, 2
10	080-093-020	1263 Los Trancos Road	R-1/S-83 and R-E/S-11 7,500/one acre (split zoning)	58,810	2,510	Yes, potentially 2. Additional site specific analysis due to split zoning
11	080-232-090	338 Ramona Road	R-E/S-11 One acre	46,170	3,220	No
12	080-232-080	342 Ramona Road	R-E/S-11 One acre	44,430	3,290	No

Source: Zillow.com, 2015; San Mateo County 2015 (http://www.smcare.org/apps/ParcelMaps/default.aspx)
*Only parcel 080-233-040 is proposed for annexation to WBSD. The other parcels in this table border the road where the sewer line would be installed and may apply for annexation separately to connect to the sewer line.

Proposed Sewer Line Design and Construction

The system would be entirely gravity flow, and would connect into the WBSD's existing main line in Los Trancos Road bordering 1243 Los Trancos Road. This portion of the sewer line was 500-feet that connected a 1.355-acre, eight-assessor's parcel property that was annexed to the West Bay Sanitary District's (WBSD) Service Area in 2010. Prior to that, this line is part of the sewer extension that was constructed in 2008 (Initial Study and Negative Declaration were completed in 2001 and annexation was approved in 2004) for the majority of the Los Trancos Wood residential area. This extension follows Los Trancos Road to the line that is just south of the entrance to the Blue Oaks Subdivision where it connects to mains that run through Portola Valley and Menlo Park, eventually transporting effluent to the South Bayside System Authority Treatment Plant in Redwood City.

The proposed sewer system would be comprised of an approximately 900-foot, 8-inch diameter gravity-flow pipeline and associated manholes in Los Trancos Road and Vista Verde Way, as well as a 4-inch diameter lateral pipeline and cleanout facility to the proposed annexation site. Additional 4-inch sewer line connectors and clean-outs would be installed at a later time when the other properties in the project area apply for annexation to the WBSD, and are not considered part of the proposed project. Some on-site connections for downslope lots would require ejector pumps when the elevation is lower than the gravity main. No pump stations or grinder pumps are proposed. The proposed sewer line extension is shown in Figure 2.

After the new sewer lines are in place, individual homeowners would be responsible to apply for Class 1 sewer hookups with WBSD, and for abandonment of existing septic systems with the San Mateo County Environmental Health/Land Management Department. All homes that have been annexed into the WBSD and have a property line within 100 feet of a public sewer line must connect to the public sewer, per WBSD regulations, Section 600.

The proposed pipeline would be underground in Los Trancos Road. The proposed alignment is shown on Figure 2. Installation of the proposed sewer lines and hookups to existing lines would involve grading, excavation, and directional drilling. The construction crew may use a traditional excavation method (trench and cover), horizontal directional drilling, or a combination of both. In the traditional method, the same crew would cut the street pavement, excavate, place steel plates over the trench, install the pipe, backfill, and repave the street over the cut. With the directional drilling, a drill is placed in a manhole and a hole is bored underground, trailings are removed, and the pvc pipe is pushed through the hole. There would be approximately 7 manholes along the new 8-inch sewer main and one lateral cleanout installed at the annexation site. The trench for the new 4-inch sewer line for the annexation site connection would be 50-100 feet long, 3 feet wide and 3-4 feet deep. Total area of disturbance for the proposed project would be 5 feet beyond the limits of all trenching. Standard construction equipment, including trenchers, backhoes and trucks, would be used for pipeline excavation and construction. Sewer lines would be built to WBSD standards and assembled in the project area using pvc pipe; no welding would be necessary. The staging area and equipment storage would probably be at and/or adjacent to the annexation site.

Construction would be completed in one phase that would last approximately 4 to 30 days over a period of six weeks, depending on the contractor, and would occur during the dry season. Construction would result in 2 to 15 truck trips/day depending on the contractor.

9. Setting and surrounding land uses:

The project area is within Los Trancos Woods, an unincorporated residential community located in the hills of San Mateo County (see Figures 1 and 2). Local access to the project area is provided from Alpine Road, which connects to Arastradero Road and the Interstate 280. Los Trancos Woods is heavily

wooded with most lots developed with single-family homes. Streets within the study area are very narrow and have no sidewalks or streetlights. Homes range in style from older, cabin-style smaller homes to newer, larger houses. About 15 percent of the lots in Los Trancos Woods are undeveloped, helping to add to the rural character of the area.

The project area includes the 1.174-acre site that is proposed for annexation as well as 11 adjacent parcels (10 of which are already developed) that could be annexed into the WBSD Service Area because of the sewer line extension that is part of this project. The upslope site to be annexed is currently vacant.

10. Other public agencies whose approval may be required:

The proposed project would require consultation with the following agencies and municipalities with jurisdiction over the project area, in addition to LAFCo:

a. San Mateo County Environmental Health/Land Management Department. A permit from the San Mateo County Environmental Health/Land Management Department would be required for abandonment of existing septic systems.

b. San Mateo County Planning Department. Tree removal permits would be required for any "significant" and "heritage" trees removed, as defined in the San Mateo County Ordinance Sections 11,050 and 12,012. A grading permit would be required, per San Mateo County Ordinance Section 8600. Design review would be required by the Planning Department for any new houses.

c. San Mateo County Public Works Department. An encroachment permit for construction in the street right-of-way would be necessary from the San Mateo County Public Works Department.

d. West Bay Sanitary District. The District would need to approve the Service Area Annexation. In addition, homeowners would be required to apply for Class 1 permits for individual hookups.

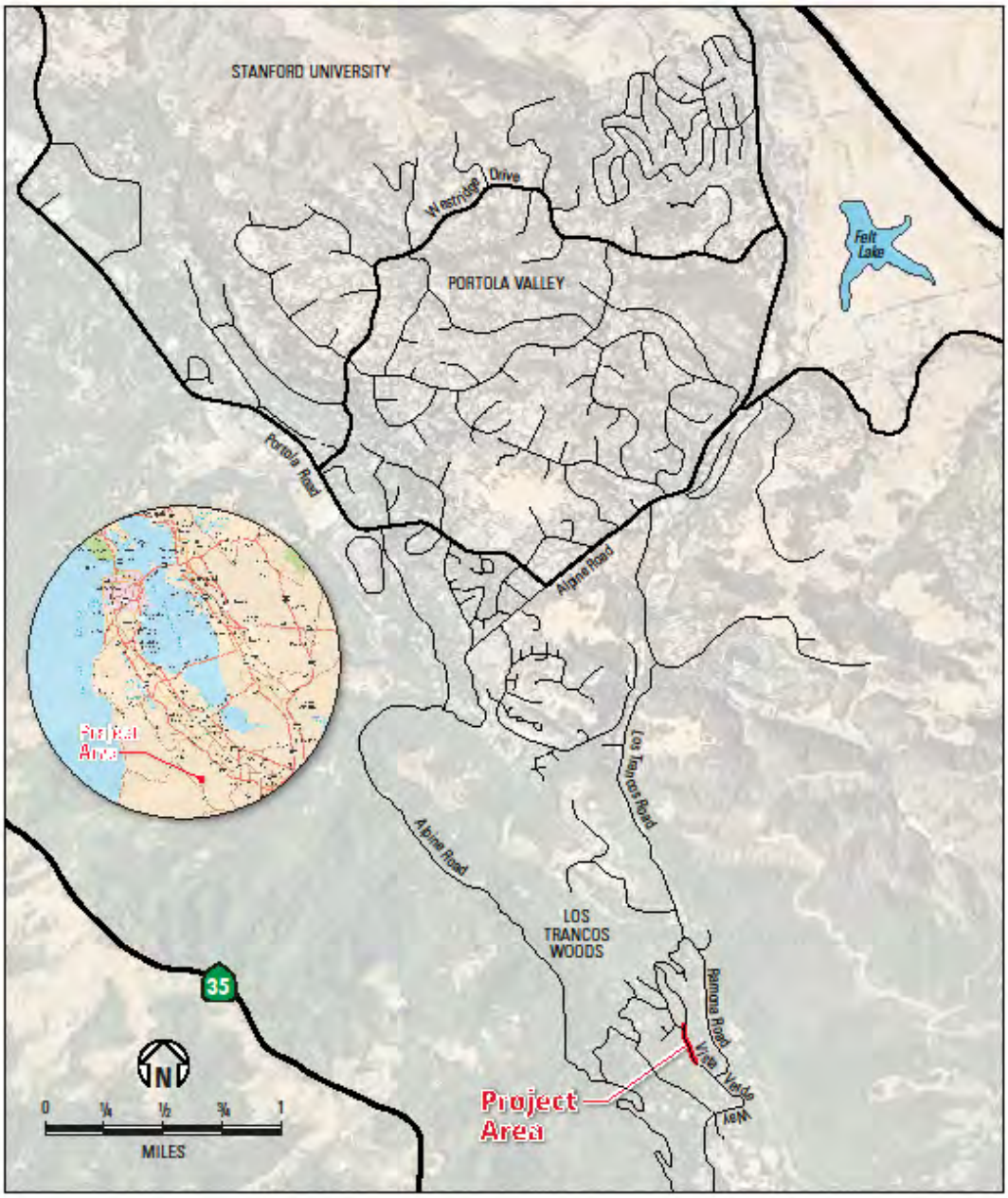

Figure 1

Project Location

Source: Grassetti Environmental, TomTom and Bay City Guide Maps

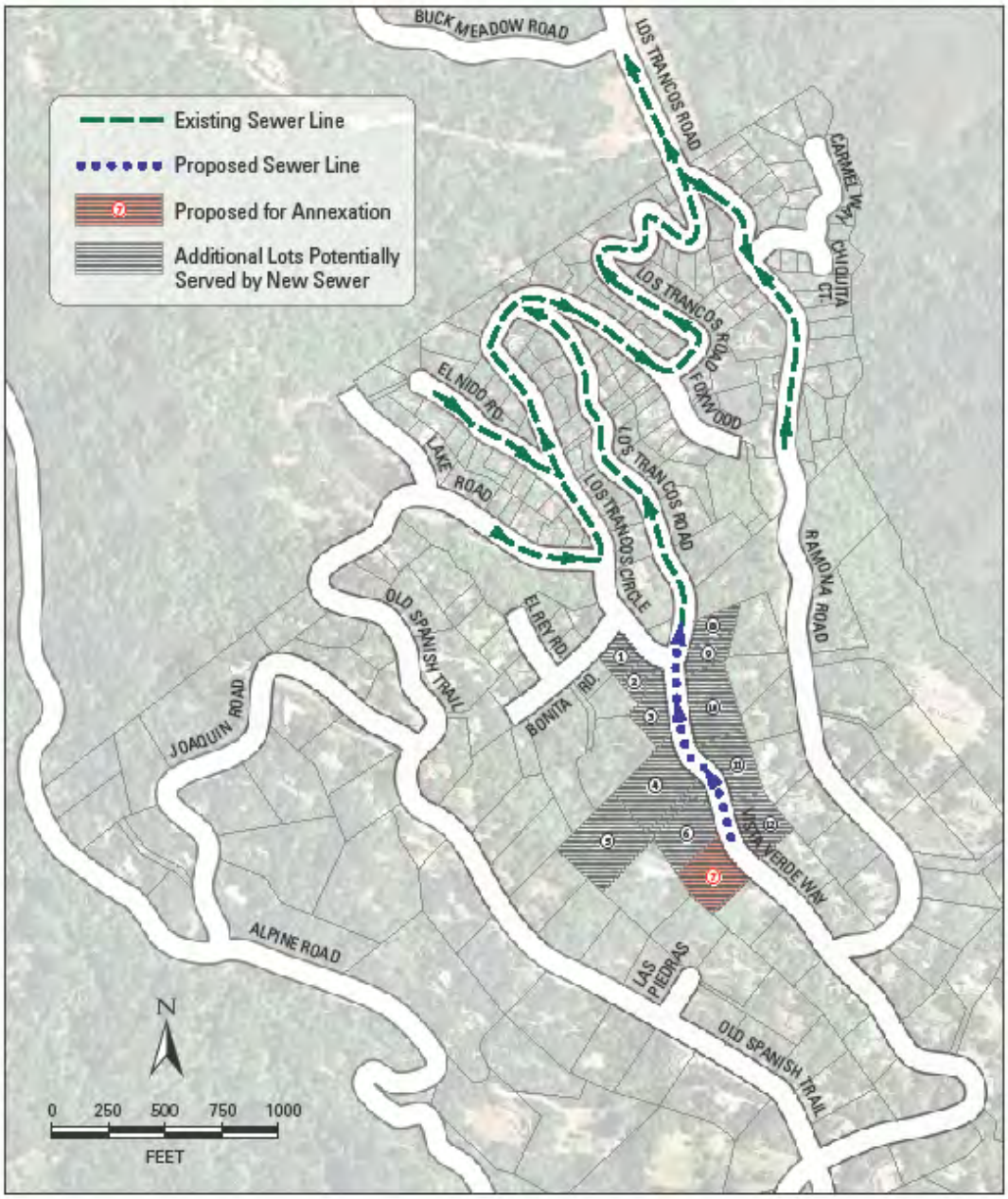

Figure 2

Proposed New Sewer Line
and Potential New Service Area

Source: San Mateo County LAFCO

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	[ ] Air Quality
[X] Biological Resources	[ ] Cultural Resources	[ ] Geology/Soils
[ ] Greenhouse Gas Emissions	[ ] Hazards/Hazardous Materials	[ ] Hydrology/Water Quality
[ ] Land Use/Planning	[ ] Mineral Resources	[X] Noise
[ ] Population/Housing	[ ] Public Services	[ ] Recreation
[X] Transportation/Traffic	[X] Utilities/Service Systems	[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.

[X] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

[ ] I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

[ ] I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

[ ] I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an **earlier EIR or NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Martha Poyatos	Executive Officer
Printed name	Title

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 16 different broad environmental categories, such as air quality, cultural resources, land use and traffic (and arranged in alphabetical order). The Guidelines also provide specific direction and guidance for preparing responses to the Environmental Checklist. Each question in the Checklist essentially requires a "yes" or "no" reply as to whether or not the project will have a potentially significant environmental impact of a certain type, and, following a Checklist table with all of the questions in each major environmental heading, citations, information and/or discussion that supports that determination. The Checklist table provides, in addition to a clear "yes" reply and a clear "no" reply, two possible "in-between" replies, including one that is equivalent to "yes, but with changes to the project that the proponent and the Lead Agency have agreed to, *no*", and another "no" reply that requires a greater degree of discussion, supported by citations and analysis of existing conditions, threshold(s) of significance used and project effects than required for a simple "no" reply. Each possible answer to the questions in the Checklist, and the different type of discussion required, is discussed below:

- Potentially Significant Impact. 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 described in the question.

- Less Than Significant With Mitigation. 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.

- Less Than Significant Impact. 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.

- No Impact. 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
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
II. 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 environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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)) or timberland (as defined by Public Resources Code section 4526?				X
d) Resulting 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
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			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)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
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
V. CULTURAL RESOURCES -- Would the				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project:				
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		
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
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				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
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?			X	
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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	
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
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?			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
X. LAND USE AND PLANNING - Would the project:				
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				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XI. 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?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		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?				X
f) For a project within the vicinity of a				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				
XIII. POPULATION AND HOUSING -- Would the project:				
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?				X
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	
XV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Exceed the capacity of the existing circulation system, based on applicable measures of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including but not limited to, level of service standards and travel demand measures and other standards established by the county congestion management agency for designated roads or highways?			X	
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)?				X
e) Result in inadequate emergency access?		X		
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVII. UTILITIES AND SERVICE				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
SYSTEMS - Would the project:				
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?			X	
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?			X	
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	
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --				
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		X		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

E. CHECKLIST RESPONSES

I. AESTHETICS – *Would the project:*

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

No impact. The project is not located in a scenic vista. Los Trancos Woods is not within a scenic corridor on the San Mateo County Scenic Corridors map (San Mateo County Planning and Building Department, 2015). In addition, construction of an underground pipeline would not affect views or vistas.

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

No impact. The project area is not within a State Scenic Highway (California Department of Transportation, 2015) nor would it otherwise affect views or vistas. The closest scenic corridor is Highway 35, approximately 1.2 miles to the west of the site. Distant views of the site are blocked by hills and dense vegetation, and the site is not visible from Highway 35 (San Mateo County Planning and Building Department, 2015).

c) Substantially degrade the existing visual character or quality of the site and its surroundings.

Less-than-significant impact. The main elements of the proposed project (sewer lines and associated hookup components) would be located underground. Therefore, after the construction period is complete, the pipeline and connection elements of the proposed project would not degrade the existing visual character or quality of the site and its surroundings.

If the proposed sewer extension project results in development of vacant and underdeveloped lots within the project area, this could be considered to be indirect visual impacts. This would tend to increase the apparent development density of the area. Construction of additions or larger homes also could affect the area's visual quality. However, each individual home would be subject to County design review. In addition, lots could be developed without the sewer annexation project if alternative (non-septic) sewer systems are approved by San Mateo County Department of Environmental Health. See Section X, Land Use and Planning, for additional discussion of the potential for new development with project implementation.

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

No impact. The proposed project would not involve any structures containing glass panels or lighting. Therefore, the project would not create any light or glare. As noted above, any future houses would be subject to County design review, which would include light and glare issues.

II. AGRICULTURE AND FOREST RESOURCES – *Would the project:*

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No impact. There is no agricultural activity and no designated Prime Farmland in the project area. All land within the project area is designated "Urban and Built-Up Land" by the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (CDC, 2009; San Mateo County Planning

and Building Department, 2006). Surrounding areas to the west and north are designated "other land" and to the southeast they are designated "grazing land." Therefore, the project would not impact prime agricultural lands.

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

No impact. The project area is not located within or adjacent to any lands protected by the Williamson Act, nor is the area zoned for agricultural use (San Mateo County Planning and Building Department, 2015).

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?

No impact. The proposed project is in an area that is zoned single-family residential (San Mateo County Planning and Building Department, 2015). There are no adjacent lands that would meet the definitions of forest land or timberland. Therefore, there would be no impact.

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

No impact. No forest lands are located within or adjacent to the project area and, as such, the project would not result in any direct loss of forest land.

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?

No impact. The proposed annexation and sewer line extension, which is in an already developed area (designated "Urban and Built-up Land" on CDC maps), would not result in conversion of Farmland.

III. AIR QUALITY – *Would the project:*

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

Less-than-significant impact. The Bay Area Air Quality Management District (BAAQMD) adopted its 2010 *Bay Area Clean Air Plan* (CAP) in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter and air toxics (TACs) in a single, integrated plan; and establish emission control measures to be adopted or implemented. The primary goals of the 2010 Bay Area CAP are to:

- Attain/maintain air quality standards;
- Reduce population exposure to air pollutants and protect public health in the Bay Area.

The proposed project would be to extend an existing sewer line to serve existing houses that are not presently connected to the WBSD sewer network as well as one additional undeveloped lot already zoned for single family residential use. Thus, it does not have any potential to substantially affect regional housing, employment, and/or population projections within the Bay Area Air Basin. As the analysis below demonstrates, the project would not have significant and unavoidable air quality impacts because it meets all BAAQMD CEQA thresholds with the Mitigation Measure III.b.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact with mitigation incorporated.

Construction-Related Impacts

The project would construct about 900 feet of new sewer line to be connected to the existing WBSD system. Construction activities are expected to commence this year and be completed in about 6 weeks. Project construction may use a traditional excavation method (i.e., street pavement cut, excavate trench, place steel plates over the trench, install the pipe, then backfill) or horizontal directional drilling (i.e., drill placed in manhole, horizontal hole bored underground, tailings removed, then pipe pushed through the hole), or a combination of both.

Project construction would generate temporary emissions of criteria pollutants in equipment exhaust and fugitive dust from equipment and material movement. Equipment emission rates that are included in CalEEMod (California Emissions Estimator Model, Version 2013.2.2) were used, along with a Project-specific equipment list and schedule, to quantify construction-related emissions of criteria pollutants (as shown in Table 2 assuming that the traditional excavation method would be used entirely; since less equipment would be needed for horizontal directional drilling, emissions from the former method would be a worst-case estimate). See Appendix A for emissions estimates and model assumptions.

Table 2: Project Construction Equipment Type, Number and Use

Construction Phase/ Equipment Type	Equipment Number	Equipment Use (hours/day)	Equipment CalEEMod Equivalent	Horsepower CalEEMod Default
Excavating and Shoring				
Backhoe	2	6	Tractors/Loaders/ Backhoes	98
Excavator	2	6	Excavator	163
Water Truck	1	4	Off-Highway Truck	400
Street Restoration				
Paver	1	2	Paver	84

Table 3 provides the estimated short-term project construction equipment, truck and worker vehicle commute emissions. The average daily construction period emissions over a 6-week period in 2015, when all construction activity would occur, were compared to the CEQA significance thresholds. All construction-related emissions would be below the thresholds.

Table 3: Project Construction Criteria Pollutant Emissions (pounds per workday)

Construction Period	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Year 2015 (6 weeks)	1.8	20.6	1.1	1.0
Significance Thresholds	54	54	82	54
Significant Impact?	No	No	No	No

The *CEQA Air Quality Guidelines* require a number of construction Best Management Practices (BMPs) to control fugitive dust, and the use of paints and coatings compliant with BAAQMD volatile organic compounds (VOC) control regulations. Thus, the following measures must be implemented by the project construction contractor:

Mitigation Measure III.a. BAAQMD Required Dust Control Measures: The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publically visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Project Operational Impacts

Once the project sewer line construction is complete, operation of the sewer line would have no associated operational emissions. Emissions associated with new residents in any new houses constructed in the project area would be minimal. Thus, project operational air quality impacts would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less-than-significant impact. As discussed under III.b. above, project construction emissions would be below the BAAQMD significance thresholds. Therefore, the project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone or particulate matter. Thus, cumulative emission impacts would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-significant impact. Ambient TAC concentrations produced by project and other significant local TAC sources within 1,000 feet of a project site are considerd "substantial" if they exceed the CEQA health risk thresholds at senstive receptors within this zone. Land uses in the vicinity of the project area vicinity are predominantly residential. The nearest existing residential land uses are the homes lining the pipeline route that may connect to the new line when it is complete.

Construction-Related TAC Impacts

Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by California Office of Environmental Health Hazard Assessment (OEHHA) and the BAAQMD in *Recommended Methods for Screening and Modeling Local Risks and Hazards*, incremental cancer risks are estimated by applying established toxicity

factors to modeled TAC concentrations. Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of the project's incremental TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant.

Ambient TAC concentrations (specifically the $PM_{2.5}$ contained in diesel-powered construction equipment exhaust) produced by project construction equipment could substantially affect sensitive receptors within 1,000 feet of the locus of construction activity. However, the CEQA significance thresholds for TACs are based on assumptions of exposure duration of a year or longer (i.e., a year for chronic non-cancer health impacts, 70 years for cancer risk). Given the project specification that the pipeline would be installed in 6 weeks, the TAC exposure period for all the closest residential receptors would be very short. Thus, project-related TAC health risks would be substantially below the CEQA health-risk significance thresholds and project-level TAC impacts would be less than significant.

Cumulative TAC Impacts

The *CEQA Air Quality Guidelines* method for determining cumulative TAC health risk requires the tallying of risk from project sources and all permitted stationary sources and major roadways within 1,000 feet of a project site and adding them for comparison with the cumulative health risk thresholds.

A database of permitted stationary emissions sources and their health risks is available online from the BAAQMD through the *Stationary Source Risk & Hazard Analysis Tool* (BAAQMD, 2012). There are no such permitted stationary sources or major roadways located within 1,000 feet of the project site. Thus, cumulative TAC impacts would be less than significant.

e) Create objectionable odors affecting a substantial number of people.

Less-than-significant impact. The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a project. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. With respect to the proposed project, diesel-fueled construction equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Thus, odor impacts associated with construction of the project would be less than significant.

Individual property owners would be responsible for applying for septic system abandonment permits from the San Mateo County Environmental Health/ Land Management Department. Removal of septic systems would be completed in compliance with Health Department standards such that no objectionable odors would result.

Odor potential is much lower with sub-surface sewers than for existing septic tanks and leach fields. Odors are much more associated with anaerobic, upset conditions. Such events are far more common with septic tanks than with underground sewers. Therefore, the proposed project would reduce the chance for impacts from objectionable odors over existing conditions.

IV. BIOLOGICAL RESOURCES – *Would the project:*

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less-than-significant impact. A biological resources report, including a site reconnaissance and

database search, was conducted in March 2015 for the project area by Jane Steven, Project Biologist. That report is included as Appendix B to this Initial Study. The discussion below is summarized from that report.

Vegetation

The vegetation at the 1.2-acre annexation site can be characterized as a forest or woodland, consisting primarily of an overstory of large black oak (*Quercus kelloggii)*, coast live oak (*Quercus agrifolia*), and madrone trees (*Arbutus menziesii*). Native shrubs include poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), and California blackberry (*Rubus ursinus*). Non-native French broom (*Genista monspessulana*), an invasive exotic species, has also spread on the site, especially on the lower portion nearer the road (California Invasive Plant Council 2015).[1] Herbaceous species include native plants, such as miner's lettuce (*Claytonia perfoliata* ssp. *mexicana*), wood fern (*Dryopteris arguta*), Pacific hound's tongue (*Cynoglossum grande*), and soaproot (*Chloragallum pomeridianum*). Non-native herbaceous species, such as prickly lettuce (*Lactuca serriola*), wild geranium (*Geranium molle*), and milk thistle (*Silybum marianum*), were observed also primarily nearer the road.

The other properties that can potentially be annexed have also retained elements of the native oak and mixed evergreen forest plant communities that were present before development. In addition to the species listed above, there are numerous large native California bay (*Umbellularia californica*), coast live oak, blue oak (*Quercus douglasii*), black oak, and big-leaf maple trees (*Acer macrophyllum*). In addition, home owners have planted a wide variety of non-native landscape plants. Where native understory plants remain, they consist of such species as toyon (*Heteromeles arbutifolia*), snowberry (*Symphoricarpos albus*), and sword fern (*Polystichum munitum*). Introduced English ivy (*Hedera helix*), periwinkle (*Vinca major*), dandelion (*Taraxacum officinale*) and Bermuda buttercup (*Oxalis pes-caprae*) and non-native grasses such as wild oat (*Avena fatua*) and ryegrass (*Festuca perennis*) are also present (Marangio 2010).

Wildlife

Wildlife observed within the project area includes several common species of birds including scrub jay (*Aphelocoma californica*), chestnut-backed chickadee (*Poecile rufescens*), American crow (*Corvus brachyrhynchus*). Four black-tailed deer (*Odocoileus hemionus columbianus*) were observed browsing at the annexation site. Many other common wildlife species would be expected to utilize the annexation site and adjacent properties along the project area boundary, including gray squirrel (*Sciurus griseus*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), slender salamander (*Batrachoseps attenuates*), and southern alligator lizard (*Elgaria maulticarinata*).

Special-Status Species[2]

No special-status plant species were observed at the site during the survey. Most special-status plant species observed within a radius of approximately five miles from the proposed project area are not likely to be found at the site because of lack of appropriate habitat, such as chaparral, scrub, wetlands, grassland,

[1] French broom is rated as a "high" level of invasiveness. High is defined as "These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically" (California Invasive Plant Council, 2015).

[2] For purposes of this Initial Study, special-status species include federally- and state-listed endangered, threatened, or rare species, species proposed or candidates for state or federal listing as endangered, threatened, or rare, and species that meet CEQA Guidelines, Section 15380 criteria for endangered, rare, or threatened species, as well plants on CNPS's List 1B and List 2 and animals listed by CDFG as a Species of Special Concern.

serpentine soils, or sandy soils; or have most likely been extirpated, as indicated in the Biological Resources Technical Report in Appendix B (see Table C-1 in Appendix C of the Biological Report). Some species also are found at lower elevations. Three special-status plant species have been found in similar habitats to the project area and may be found there: Western leatherwood (*Dirca occidentalis*), fragrant fritillary (*Fritillaria liliacea*), and arcuate bush mallow (*Malacothamnus arcuatus*). Western leatherwood and fragrant fritillary could be readily identified during the field survey, but was not seen and is assumed not to be present. Arcuate bush mallow is mostly found elevations that are lower than the project area, which reduces its likelihood of being found at the site (CDFW 2015a). Although this species blooms outside the survey time, it would have been identifiable to Genus. No mallows were observed at the site. Therefore the project would have no impacts to special status plants.

No special-status wildlife species were observed during the site survey. Most special- status animals observed within a radius of approximately five to ten miles from the proposed project area are not likely to be found at the site because of lack of appropriate habitat such as wetlands, streams, riparian areas, grasslands, deserts, or scrublands, serpentine soils, or friable soils, or have most likely been extirpated, as indicated in the Biological Resources Technical Report in Appendix A (see Table C-2 in Appendix C of the Biological Report). Two bat species and a rodent species may be found in or near the project area: pallid bat (*Antrozous pallidus*), Townsend's big-eared bay (*Corynoryhinus townsendii*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectans*). These three species are California Species of Special Concern. The bats are unlikely to be found at the annexation site because there are no buildings and no hollow trees were observed. These species are very sensitive to human disturbance, so the likelihood of a building adjacent to the project area being unused to the point of providing habitat is very unlikely. The presence of the woodrat is readily apparent because they build stick nests of twigs on the ground and at the base and in trees in oak woodlands and riparian areas. No stick nests are present on the ground in the project study area.

The Biological Report also considered California red-legged frogs (CRLF), which are federally-listed as Threatened and is a California Species of Special Concern. Although there is no habitat for CRLF within the project area, several occurrences have been recorded within five miles of the project area and these frogs use upland areas to migrate between ponds and waterways. Because there is no breeding habitat within or adjacent to the project study area, and because no nearby breeding ponds are known, it is unlikely that CRLF would be present within the project study area. Because of the lack of habitat within two miles of the project area, it is also unlikely to be an upland dispersal site.

Construction of the 8-inch pipeline in the roadways would not have significant biological impacts because the area is paved and does not support any special-status plant or animal species. The 4-inch lateral would pass through undeveloped portions of the annexation site; however, the absence of special-status species on the site would result in a less-than-significant level of impact. Laterals to the other parcels in the project area that are not currently proposed for annexation have similar habitat and would also result in a less-than-significant level of impact.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife.

Less than significant impact. The project study area contains primarily disturbed mixed oak woodland. No plant communities identified in the CNDDB as sensitive natural communities are present.

Under the current project the main pipeline would be located under Vista Verde Way and Los Trancos Circle and one four-inch lateral pipe would extend to the annexation site, where there are no sensitive habitats. The proposed project would not affect any riparian habitat or sensitive natural community.

There is a natural grassy swale between 1260 Los Trancos Road and 281 Vista Verde Way. These properties border the road where the main pipeline would be extended and could annex to the WBSD. There was no water flowing in the swale at the time of the survey and no other obvious hydrologic indicators. The swale does not appear to continue across the road, or connect to other waterways. There were no obvious wetland or riparian species, although the wetland indicator status of the plants or percent cover were not determined for the biology report. The swale does, however, have a fairly well defined bed and banks. No work is proposed in the swale.

Although this swale is not likely to be considered a jurisdictional wetland or stream by the US Army Corps of Engineers (Corps), California Department of Fish and Wildlife, or Regional Water Quality Control Board (RWQCB), a formal delineation would be required to determine federal and state jurisdiction. Disturbance to bed and banks of stream channels, including intermittent streams, requires a Lake and Streambed Alteration Agreement from CDFG, and related water quality impacts would require a 401 Certification from the Regional Water Quality Control Board (RWQCB).

Mitigation Measure IV.1. The swale between 1260 Los Trancos Road and 281 Vista Verde Way shall be avoided. If it is necessary to cross the swale, a wetland delineation shall be required to evaluate whether it is under the jurisdiction of federal or state agencies, and any appropriate permits shall be obtained. Best Management Practices shall be implemented if there is potential for erosion and sedimentation effects.

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.

Less than significant impact. As described above, it is possible that the swale between 1260 Los Trancos Road and 281 Vista Verde Way may be considered "waters of the U.S.," which are protected from disturbance or filling under Section 404 of the Clean Water Act. However, the proposed project would not affect the swale or any other wetlands.

Mitigation Measure IV.1. See Mitigation Measure IV.1.

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.

Less than significant impact. The implementation of the project would not interfere 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. The construction of the 8-inch pipeline within roadways would have no significant impacts to biological resources because no habitat would be disturbed. Because of the disturbed nature of both the undeveloped and developed properties under consideration in this report, and the small linear footprint of the area that would be affected by excavation for and placement of the 4-inch lateral, construction of the laterals would also have minimal effect on the biological community. Construction noise may temporarily disturb migratory birds, but it would be off and on for six weeks, would move during that time period as construction of the pipeline or laterals progresses, and most or all of the species in this residential area are adapted to noise from housing construction on nearby lots, typical residential noise such as gardening equipment, or traffic.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree

preservation policy or ordinance.

Less than significant impact with mitigation incorporated. Large trees on the annexation property could be damaged or killed during construction of the sewer lateral. Significant trees are protected by County of San Mateo Heritage Tree Ordinance and require permits to remove, destroy, or trim the trees.

> **Mitigation Measure IV.2.** Lateral pipelines shall be sited to avoid damage to or losses of trees protected by the San Mateo County tree protection ordinances. Where damage or loss is unavoidable, county permits shall be obtained. Any impacts would be fully mitigated as a result.

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.

No impact. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan for the proposed project area (San Mateo County Planning and Building Department, 2015).

V. CULTURAL RESOURCES – *Would the project:*

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No impact. The project would not involve demolition or modification of any structures. Therefore, no historic resources would be affected by the proposed sewer line extension project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than significant impact with mitigation incorporated. An archaeological literature review and a site reconnaissance were conducted by Holman & Associates for the 179 Los Trancos Circle Service Area Annexation and Sewer Line Extension IS/MND (San Mateo LAFCo, 2010). The proposed pipeline connects to the 179 Los Trancos Circle extension, and the current project area is adjacent to that site. The literature review indicated that no archaeological sites exist in the project area or within one mile of it. There have been two other archaeological field studies in the immediate area, both with negative findings. None of these reports identified any archaeological deposits or habitation sites. Because of these findings for the adjacent site, no additional surveys for archaeological resources were conducted for the proposed project.

A study conducted in 2000, also by Holman & Associates, concluded that the general project area of Los Trancos Woods has an extremely low potential for containing prehistoric archaeological materials because of steep slopes of the hillsides and the tree covering which would have created an inhospitable setting for Native American villages and camp sites, and which also probably limited both hunting and gathering activities by nearby settlements (Holman & Associates, 2010). The nearest level ground of any magnitude is located to the northwest of the site in the former Blue Oaks development area, where previous archaeological inspections did not reveal any actual habitation sites (Holman & Associates, 2000).

Trenching for sewer hook ups either in the pavement of Vista Verde Way or Los Trancos Road, or on any of the lots adjacent to these roads would have no impact on known historic or prehistoric cultural resources. No archaeological monitoring during sewer trenching or mechanical subsurface testing to search for buried

archaeological materials would be required. However, in the event that any archaeological materials are uncovered when trenching for sewer laterals, the following mitigation measures shall be implemented:

Mitigation Measure V.1.

- Per WBSD Standard Conditions of Approval, if archaeological materials are uncovered during earthwork or trenching, work shall be stopped within 100 feet of the materials until a professional archaeologist certified by the Society of California Archaeology or the Society of Professional Archaeology has evaluated the significance of the find. If significant, a mitigation program shall be prepared including collection and analysis of materials prior to the resumption of grading. The program shall include duration of materials at a recognized storage facility. The program shall be developed and implemented under the direction of the San Mateo County Planning and Building Department.

- If evidence of prehistoric cultural resources (i.e., artifacts, concentrations of shell/bone/rock/ash) is encountered during construction, the Contractor shall contact the County of San Mateo to determine the value of the resources and, if necessary, implement a recovery program.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

No impact. There are no known paleontological resources or unique geological features on the proposed project area. See also response to V.1, above.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. The proposed project area is not located near a cemetery, and, as noted in V.b, above, the site is unlikely to have been inhabited; therefore it is unlikely that the site would have any buried human remains.

Mitigation Measure V.2. If any human skeletal remains are encountered during trenching for the sewer lines, all activity in the immediate vicinity of the discovery shall be halted and appropriate measures, as required by the County of San Mateo, would be followed.

VI. GEOLOGY AND SOILS – *Would the project:*

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less-than-significant impact. The proposed project area is located in the Coast Range Province, a broad area of folded and faulted rocks, numerous active faults and frequent earthquakes. The Trancos and Woodside traces of the San Andreas Fault run through the proposed project area and could potentially cause ground rupture during an earthquake. Portions of the project area are located within a State of California designated Special Studies Zone (California Division of Mines and Geology, 1974). In addition, the project area is located within a high geotechnical hazard area, as defined in the San Mateo County

General Plan (San Mateo County Planning and Building Department, 2010).

The proposed project would not include construction of any structures, habitable or other, and therefore, potential impacts of a rupture of either of these fault traces would only impact sewer pipelines. Timely repair of any cracked or ruptured pipes would reduce direct impacts from earthquakes to levels less than significant. If the proposed project induces additional development of site on the currently undeveloped lots, impacts from earthquake ruptures to these new habitable structures are possible. These indirect impacts, however, would be at levels less than significant because any new buildings would require geotechnical analyses prior to issuance of a building permit, and would be built to current seismic codes.

ii) Strong seismic shaking?

Less-than-significant impact. Strong seismic shaking could occur on the project area because of the presence of the San Andreas Fault traces on the site. A 7.2 Richter magnitude earthquake on the Peninsula-Golden Gate portion of the San Andreas Fault would produce "very violent shaking" in the project area (Association of Bay Area Governments, 2013). An earthquake on the Hayward Fault could result in light (V) to moderate (VI) shaking (San Mateo County Planning and Building Department, 2015).

The project would not involve the development of any habitable structures; therefore, potential impacts resulting from seismic shaking would only impact the sewer pipes. Mitigation would consist of immediate repair of any cracked or ruptured pipes. As mentioned in response VI.a.i, above, the proposed project could induce development of the currently undeveloped lots and would, therefore, increase the risk of seismic shaking and associated impacts to structures. However, the buildings would be built to current seismic code and subject to separate geotechnical analyses, therefore impacts would be at less than significant levels.

iii) Seismic-related ground failure?

Less-than-significant impact. See response to IV.a.i and ii, above.

iv) Landslides?

Less-than-significant impact. The San Mateo County landslide map shows Los Trancos Woods to be in an area of "mostly landslide" (San Mateo County Planning and Building Department, 2015). The proposed project does not involve construction of new structures therefore any landslides would affect only pipelines. Any damage to pipes would be immediately repaired.

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

Less-than-significant impact. The proposed project area is susceptible to minor temporary erosion during construction. Although there are steep slopes in the area, the alignment of the sewer pipes in the road is not steep. The dense vegetation on the parcel to be annexed reduces the erosion potential, but the steep slope on parts of the site would make erosion more likely. Ground disturbance from installation of lateral pipelines would be minimal (50-100 feet long, 3 feet wide and 3-4 feet deep for each connection). Implementation of best management practices including erosion control measures as required by the County of San Mateo, and described under earth-moving activities of the Stormwater Pollution

Prevention Program (Jet Engineering 2014) would reduce this impact to a level less than significant.

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?

Less-than-significant impact. Due to the absence of soil types susceptible to liquefaction, lurch cracking, and lateral spreading on the proposed project area, these types of ground failures would not be expected to cause significant impacts on the proposed project area. Liquefaction is shown as "very low" on San Mateo County's liquefaction map (San Mateo County Planning and Building 2015). The proposed project does not involve construction of new structures; therefore, any landslides would affect only pipelines. Any damage to pipes would be immediately repaired. Additionally, removal of existing septic systems would reduce water entering into the ground and therefore reduce landslide potential.

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?

No impact. The proposed project area does not contain expansive soils and does not involve construction of any new structures. Therefore construction would not create substantial risks to life or property.

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?

No impact. The proposed project would replace existing failing septic systems with new sewer lines. It would not involve continued or proposed use of septic systems.

VII. GREENHOUSE GAS EMISSIONS – *Would the project:*

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

Less-than-significant impact. In 2006, California passed the California Global Warming Solutions Act of 2006, which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide greenhouse gas (GHG) emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions).

State law requires local agencies to analyze the environmental impact of GHG under CEQA. The Bay Area Air Quality Management District (BAAQMD) has adopted a 1,100 metric ton/year threshold as a greenhouse gas (GHG) operational emissions significance criterion for determining the significance of development projects under CEQA.

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

Less-than-significant impact. Although the BAAQMD has adopted 1,100 metric ton/year as a greenhouse gas (GHG) operational emissions significance criterion for development projects, there is no similar adopted threshold for project construction emissions. Construction of the proposed project would generate a total of about 21.6 metric tons of GHG during its six-week construction phase. Because construction emissions would be short-term and would cease upon completion, GHG from construction activities would not substantially contribute to the global GHG emissions burden. Also, this is a routine utility infrastructure upgrade that would serve relatively few existing homes, and would not affect regional population,

employment or transportation projections upon which regional GHG inventories are based, or conflict with any County or State policies to reduce GHG emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS – *Would the project:*

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

No impact. The proposed project does not include any elements which would expose people to potential health hazards through the routine transport 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?

No impact. The proposed project would alleviate existing health hazards by eliminating existing septic systems which are failing due to existing high groundwater in the vicinity. Standard septic systems in the area proposed for annexation pose a threat to human health due to the potential for contamination of domestic water wells in areas of high groundwater. A study completed by the WBSD in 1982 indicated that at the time of the study, up to 31 percent of existing septic systems in the Los Trancos Woods area had apparent or suspected problems due to the age of the systems, poor soils, and steep slopes (WBSD, writ. com., 2000). Studies performed by San Mateo County Environmental Health Department have indicated that existing septic system conditions in Los Trancos Woods constitute a potential health hazard. These hazardous conditions provided justification for the sewer line extension and annexation of 60 properties into the WBSD (WBSD, 2001), and also support the need for annexation and sewer line extension for the proposed project.

All sewer line extensions would include standard design features to prevent leaks and ruptures, and would be required to meet all County of San Mateo and RWQCB standards regarding sewage facilities. Therefore, there would be no impact.

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

No impact. The project area is not within one-quarter mile of a school. The closest school is Corte Madera School, which is approximately one mile from the project area.

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?

No impact. None of the properties in project area are included on the Hazardous Waste and Substances Site List. The closest clean-up sites are approximately five miles to the northeast at the corner of Foothill Expressway and Page Mill Road (California Department of Toxic Substances Control, 2015).

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?

No impact. The project area is not within an airport land use plan and the proposed annexation and sewer line extension would not result in an airport safety hazard (San Mateo County Planning and Building

Department, 2015). The closest airport is Moffett Federal Airfield, approximately nine miles to the northeast.

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?

No impact. The proposed project is not located in the vicinity of a private airstrip (San Mateo County Planning and Building Department, 2015).

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-than-significant impact. The proposed sewer project would not interfere with any adopted emergency response or evacuation plans. Roadway blockage during project construction would be limited to one lane only, and access to the neighborhood would be maintained at all times. Pursuant to WBSD standard Conditions of Approval, the Contractor would also be required to submit a Traffic Control Plan, which would provide for any necessary construction-period detours, subject to review and approval by San Mateo County Planning staff. See also Response to Checklist Item XV.e, below.

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?

Less-than-significant impact. The project area is not located within the San Mateo County designated high fire hazard area (WBSD, 2001), although it is adjacent to areas that are indicated as fire threatened communities on the San Mateo County Wildland-Urban Interface map (San Mateo County Planning and Building Department, 2015). The annexation of the proposed parcels and sewer line extension would not present fire hazards, although the potential growth-inducing impacts of developing more houses on the property could increase fire hazards, and would be addressed in site-specific environmental assessments.

IX. HYDROLOGY AND WATER QUALITY – *Would the project:*

a) Violate any water quality standards or waste discharge requirements?

Less-than-significant impact. The proposed project would improve water quality at the site by replacing failing septic systems or septic systems that may fail in the future with new sewer lines. The proposed project could result in temporary erosion during construction that could affect water quality; however, appropriate erosion control measures would be implemented (see Mitigation Measure IV.1, under Biological Resources, above). A possible secondary effect could be development of the two vacant lots, and possible construction of secondary units encouraged by the installation of sewer lines. This could lead to an increased waste water discharge. However, the houses would be connected to the new sewer lines and the additional wastewater would be treated to current standards at the regional treatment plant in Redwood City. Therefore, this would not result in a significant impact.

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)?

No impact. The extension of sewer lines would include design features that would ensure the operational safety of the lines and prevent line rupture. Other than possible minor trench dewatering, no ground

water would be extracted or augmented with project implementation, therefore, the proposed project would not deplete groundwater supplies or interfere with groundwater recharge. Any additional future development due to the sewer line extension would connect to public water supplies.

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?

Less-than-significant impact. The proposed project would not directly involve the creation or addition of any impervious surfaces since the sewer lines would be located underground. Construction of the project could result in some erosion above Los Trancos Creek, however implementation of Best Management Practices as required by San Mateo County would reduce this impact to less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No impact. See response VIII.c, above. As discussed in VII.a, above, the installation of new sewer lines could induce development of up to 17 new units within the project area, including one residence and possibly a secondary unit on the annexation site, which would result in increased impervious surfaces. However, this area of increased impermeable surface area would be relatively small compared to the watershed, and therefore less than significant . The project would not alter surface runoff patterns within the proposed project area, and no new flooding effects would result.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No impact. The proposed project would not directly create any additional stormwater runoff because all proposed improvements would be underground. Disconnection of the septic system would reduce potential for contamination of runoff. See response to VI.b. (Geology) and IV.a.2 (Biological Resources) for discussion of potential short-term erosion control impacts and associated mitigation measures.

f) Otherwise substantially degrade water quality?

No impact. The proposed project would improve groundwater quality and water quality at Los Trancos Creek by providing for the abandonment of existing failing septic systems which are currently degrading water quality in Los Trancos Creek.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No impact. No housing is proposed as part of the proposed project; however, it is possible that the installation of new sewer lines would induce development of undeveloped lots. The site is located in a very steep hillside area and is not within the existing floodplain of Los Trancos Creek or another 100-year flood hazard zone (San Mateo County Planning and Building Department, 2015).

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No impact. The proposed project does not involve the construction of any new structures. See response to VIII.g, above.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No impact. Implementation of the proposed project would not expose people or structures to significant risk of loss, injury, or death from flooding because the project does not lie within an inundation area of a levee or dam. The closest inundation areas from dams are 2-3 miles to the south from the West Dam and Ricky Dam and about five miles to the north from the Searsville Dam (San Mateo County, 2015).

j) Inundation by seiche, tsunami, or mudflow?

No impact. There is no risk of seiche or tsunami at the site because the site is inland (San Mateo County Planning and Building Department, 2015). There is also no risk of mudflow because the site is heavily vegetated and the proposed project would not decrease vegetative cover on the sloped areas.

X. LAND USE AND PLANNING – *Would the project:*

a) Physically divide an established community?

No impact. The proposed sewer extension project would not physically divide an established community because it would be constructed under an existing roadway.

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?

No impact. The proposed project would not conflict with any land use plan, policy or regulation. The project area is within a residential and wooded area of unincorporated San Mateo County. It is subject to the San Mateo County General Plan, San Mateo County Zoning Ordinance, and LAFCo statutes.

San Mateo County General Plan. San Mateo County General Plan designates the project area as Low Density Residential. The San Mateo County General Plan Low Density Residential land use designation allows for development of 0.3-2.3 dwelling units per acre. This designation is generally applied to existing low density areas; hillside areas with steep slopes; adjacent to sensitive habitats; hazardous areas; and not within areas of high perceived noise levels (San Mateo County, 1984).

The proposed sewer line extensions and annexation of one property to the WBSD would not affect any existing land uses in the project area. Once the area is annexed and sewer lines are installed, the WBSD requires that all residences, which are annexed and are within 100 feet of the new sewer line, hook up to that line. Under the current project, only one property is being annexed and the homeowners of the other properties would be responsible for applying for annexation to WBSD. Because the project area is already within the WBSD SOI, the proposed additional sanitary sewer capacity would not exceed the identified need or planned level of development in the project vicinity, and would be consistent with the capacity of other services in the area. The WBSD has capacity to provide services to these parcels (B. Kitajima, *Writ. Comm.*, 2015).

Once sewer lines are installed and connected, the project area would be by definition an "urban area", as defined in the San Mateo County General Plan Section 7.8: "Urban areas (are) lands which are generally suitable for urban land use because they meet one or more of the following criteria: (1) surrounded by incorporated areas; (2) adjacent to an incorporated area, generally divided into parcels 5,000 sq. ft. to 5 acres and served by sanitary sewers; or (3) adjacent to an incorporated area and the major transportation corridors of Highways 101 and 280.

The San Mateo County General Plan defines development as "the construction, reconstruction, conversion, relocation or enlargement of any structure; the division of a parcel of land into two or more parcels; any mining, excavation, landfill or land disturbance; and changes in land uses" (San Mateo County General Plan, 1984, Section 4.6). As noted above, any development proposed within the project area would be subject to separate review and approval by County staff. Therefore, the proposed project would not conflict with existing land use designations for the site.

The proposed project would help achieve several policies of the San Mateo County General Plan relative to the proposed project and the provision of services, including the following policies:

- *Allow the removal of trees and natural vegetation when done in accordance with existing regulations* [4.58(a)];

- *Encourage the placement of new and existing public utility lines underground* (4.31);

- *Coordinate water supply planning with land use and wastewater management planning to assure that the supply and quality of water is commensurate with the level of development planned for the area* (10.1);

- *Plan for the provision of adequate wastewater management facilities to serve development in order to protect public health, wildlife habitats, and water quality* (11.1);

- *Coordinate wastewater management planning with land use and water supply planning to assure that the capacity of sewerage facilities is commensurate with the level of development planned for an area* (11.2);

- *Encourage the use of wastewater management systems that utilize current technology* (11.3);

- *Plan for the availability of adequate sewerage collection and treatment capacity for unincorporated urban areas* (11.4);

- *Wastewater Management in Urban Areas: (a) Consider sewerage systems as the appropriate method of wastewater management in urban areas; (b) Encourage the extension of sewerage systems to serve unincorporated urban areas presently using individual sewage disposal systems where warranted by public health concerns, environmental pollution or the planned density of development; and (c) Continue the use of existing individual sewage disposal systems in urban areas where lot sizes, site conditions, and planned densities are appropriate for these systems and where individual sewage disposal systems have functioned satisfactorily in the past* (11.5); and

- *In unincorporated areas where the County provides sewerage collection services, support the development of adequate sewerage facilities to serve the planned development of these areas. Work with sewerage authorities and cities to reserve capacity commensurate with the level of development planned for these areas* (11.16).

Tree removal associated with the proposed project would be subject to the requirements San Mateo County significant and heritage tree ordinances (see discussion in Section IV.e, above). Therefore, the proposed project would be compliant with Policy 4.58(a).

The proposed project has the potential to remove septic systems in areas of high groundwater conditions

on some parcels in the project area, once the parcels are annexed to the WBSD. The only property currently being annexed is vacant and has no septic system. Site characteristics of high groundwater and slope constraints would impede implementation of septic systems on other parcels in the project area. In addition, San Mateo County Health Department staff has indicated that existing septic systems in the project area constitute a potential health hazard (WBSD, 2001). Therefore, implementation of the sewage pipelines in the proposed project would mitigate existing health hazards associated with failing septic systems, and thus help implement Policies 4.31, 11.1, 11.3 and 11.5.

Policies 11.2, 11.4 and 11.16 have already been largely implemented because the project area has been previously incorporated into the WBSD Sphere of Influence (SOI). The WBSD has determined that the District has sufficient capacity to provide service to the project area, since the project area is already included in the WBSD SOI, and therefore, the WBSD determined during previous environmental review that it has sufficient capacity to serve the parcel proposed for annexation.

Policies 10.1 and 11.2 are related to coordination of planning for water and wastewater systems. The project area is within the jurisdiction of the California Water Service Company (Cal Water), Bear Gulch District for water supply. For wastewater, the project area is within the SOI of the WBSD. Cal Water and WBSD have indicated that there are adequate water supplies and wastewater systems to serve the project area (L. Mathias, *Writ. Comm.*, 2010; B. Kitiajima, *Writ. Comm.*, 2015). See additional discussion of water supply under Public Utilities, XVI (b), below.

San Mateo County Zoning Ordinance. The San Mateo County Zoning Ordinance designates the annexation parcel and six of the other parcels that may connect to the sewer line as single-family residential (R-E/S-11). The zoning designation for three of the properties within the project area are R-1/S-108, one property is R-1/S-83 (Single Family Residential/Combining District – Los Trancos Woods), and the last property is split with the northern part in R-1/S-83 and the southern portion in R-E/S-11.

Detailed information on zoning designation, minimum parcel size, actual parcel size, existing house size, and whether the property could be subdivided is provided in Table 1 in the project description section of this document. Of the 12 parcels in the project area, two parcels are undeveloped, including the annexation site. Within the project area shown in Figure 2, the San Mateo County Planning Department estimated that 12 primary and 5 secondary units (for a total of 17 new units) could potentially be developed, based on the following criteria and the Single Family Residential Zoning Designation: vacant lots; assessor's parcels with more than one lot that is developable; lots that could be further subdivided; and potential for second units (S. Rosen and D. Holbrook*, Pers. Communication* with San Mateo LAFCo*,* 2015*)*. Because of severe geotechnical site constraints, each lot would need to be reviewed on a case-by-case basis. Any development proposed within the project area would be subject to separate review and approval by the County.

Because the proposed sewer line extension and annexation project would not involve development of any new structures[3], it would not conflict with the San Mateo County Zoning Ordinance. Any new development that may be served by the extended sewer line would require separate review when it is proposed.

LAFCo Statutes. The proposed project would be consistent with the following LAFCo statutes relative to service district boundaries (San Mateo LAFCo, 2001):

[3] A residence is expected to be constructed at the annexation site. Evaluation of consistency with the San Mateo County Zoning Ordinance for the residence will be conducted separately.

- *District boundaries should not create islands or corridors unless these areas are designated or reserved for open space or regional facilities which are best left without the provision of services.* (V.5)

- *Special districts are the appropriate agencies to provide essential services in areas in which only a limited range of services is required or, if a full range of urban services is required and where it is not feasible for those services to be provided by a single city.* (V.11)

The proposed annexation would not create any service islands or corridors. Policy V.11 supports LAFCo's role in the proposed annexation of the parcel to the WBSD. The Los Trancos Woods development is within an unincorporated area of San Mateo County.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000) also provides support for LAFCo's role in the proposed annexation of the parcel to the WBSD.

> *56001: "The Legislature also finds that, whether governmental services are proposed to be provided by a single-purpose agency, several agencies, or a multipurpose agency, responsibility should be given to the agency or agencies that can best provide government services."*
>
> *56668 Factors to be considered in the review of a proposal shall include, but not be limited to, all of the following: [sections that apply only…. (b) The need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas. "Services," as used in this subdivision, refers to governmental services whether or not the services are services which would be provided by local agencies subject to this division, and includes the public facilities necessary to provide those services… (d) The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Section 56377… (f) The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries… (h) The sphere of influence of any local agency which may be applicable to the proposal being reviewed.*

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact. There is no habitat conservation plan or natural community conservation plan applicable to the project area.

X. 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 impact. No mineral resources that would be of value to the region and the residents of the state are known to occur within the project area.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No impact. No locally-important mineral resources recovery area is designated for the site on in the San Mateo County General Plan (San Mateo County Planning and Building Department, 2015). No specific plan or other land use plan is applicable to the project area.

XI. NOISE – *Would the project:*

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?

Less-than-significant impact with mitigation incorporation. No long term noise impacts would result with project implementation. However, some noise would be generated during the construction period.

Applicable policies and standards governing environmental noise on and around the project area are set forth in the Noise Element of the San Mateo County General Plan and the Noise and Vibration Control Ordinance in the San Mateo County Code (San Mateo County, 2010; Municode, 2015).

Ambient noise measurements were taken at three nearby locations for the Los Trancos Woods Sewer Annexation Initial Study (WBSD, 2001), including at the intersection of Los Trancos Road and Los Trancos Circle, which is at the northern portion of the current project. There have been no major changes in land uses or development, so the noise levels recorded in 2001 should be similar to current levels. Noise levels currently are likely to be higher at Los Trancos Road and Los Trancos Circle because of construction of a residence at Los Trancos Circle, which was annexed in 2010 to the WBSD. All three of the locations had almost identical noise levels ranging from 46-48 dB Leq, which are very low. The loudest noise recorded was from a delivery van driving by on Ramona Road at Carmel Way with a 70 dB Leq. The low noise levels are typical of the semi-rural nature of the area, and make it susceptible to temporary noise intrusion from short-term construction activities.

The proposed project entails construction of an 8-inch sewer pipeline within Los Trancos Road and Vista Verde Way with a 4-inch lateral to serve the annexation lot. Pipelines are not perceived as significant noise generators because there is minimal noise associated with fluid flowing in an underground pipeline. Potential project noise impacts from pipeline projects therefore derive almost exclusively from construction activities.

The San Mateo County Noise Ordinance exempts construction operations from the provisions of the ordinance between the hours of 7 a.m. to 6 p.m. on Monday through Friday, 9 am through 5 pm on Saturday, but does not provide any exemption on Sundays, Thanksgiving, or Christmas. By confining construction to allowable hours and days, there would be no impact from inconsistency with the Noise Ordinance. Short-term temporary construction noise thus constitutes the only potentially significant source of impact. Construction of the pipeline is expected to be completed in 4 to 30 days over a period of six weeks.

A construction activity would be considered to result in "substantial" short-term temporary construction noise if it intrusively interfered with normal living during the construction process. In many cases, usable outdoor space is located behind the house, such that the structure itself would shield normal outdoor use. The construction activity would thus be most intrusive if it interfered with interior activities.

When noise levels exceed 65 dB, it becomes difficult to carry on a conversation, talk on the phone, hear the television, etc. With closed windows, the structure is able to reduce noise levels by 20 dB. With windows facing the construction area closed, an exterior level of 85 dB would be able to be accommodated before residential interior would be substantially impacted. An exterior noise level of 85 dB, sustained over any

appreciable period of time (one hour or more) would thus be considered a potentially significant source of impact.

Construction noise generated from the operation of heavy equipment and truck traffic would constitute the primary noise impact from the proposed pipeline project. Varying types and sizes of construction equipment will be utilized during construction of the proposed pipeline, but similarities in the dominant noise sources and in patterns of operations allow the assignment of all equipment to a limited number of categories. These categories are earth-moving equipment, partly mobile equipment, stationary equipment, truck traffic, and impulse noise.

Earth-moving equipment, such as trenchers and backhoes theoretically generate 73 to 96 dB(A) with an average of 82 dB at 50 feet away, although in-field measurements of equipment at another pipeline project have been approximately 4 dB lower on average. Noise from directional drilling is similar to or less than excavation or a dump truck, which is 76 to 84 dBA (Federal Highway Administration, 2011). Directional drilling noise would be less as the drill progresses away from the initial hole and is muffled because the sound is underground, and, therefore, would be less than excavation. Holes would need to be excavated for the 7 manholes, but this would be short-term. Therefore, construction noise from earth-moving equipment are not expected to exceed the 85 dB exterior standard and the impact would be less-than-significant.

Given that the pipeline will progress perhaps 100 feet per day in most portions of the alignment, peak noise impacts might last only two days in a particular location before the continued forward movement of construction activities will create the distance buffer of its own. The very brief period of potential impact from temporary cut-and-cover operations and the fact that measured construction activity noise levels were well below their theoretical maximum suggests that temporary noise impacts would be self-limiting.

Theoretical noise levels from partly mobile equipment, such as cranes, concrete mixers, and concrete pumps at 50 feet range from about 76 to 88 dB(A). A noise measurement of semi-stationary noise sources was conducted during steel pipeline placement by a crane and subsequent welding of the pipeline seams. Observed levels were a maximum one-hour measurement of 74.1 dB. As with the excavator, the observed noise level from this equipment of was noticeably lower than its theoretical level. There appears to be little probability that the 85 dB, one-hour significance criterion would be exceeded outside the construction right-of-way from partly mobile equipment. Maximum hourly noise of 74 dB at 50 feet translates into a 78 dB one-hour maximum at the closest building facade. With closed windows, interior levels would not exceed 65 dB.

Stationary equipment which could be used during construction activities may include generators, pumps, and air compressors. Typical noise levels at 50 feet range from 69 to 86 dB(A). Such equipment is generally the smallest and least noisy, although it sometimes has to keep running during the night. Placement the equipment behind temporary berms or shields or greater than 50 feet from any bedroom window would reduce the impact to a less-than-significant level. Residences in the project area on Vista Verde Way, where most of the pipeline construction would take place, are over 70 feet on steep slopes above the road or below the road.

Truck traffic would occur in limited amounts to haul away excess excavated material or to bring in backfill if the excavation spoils are not suitable for such use. Each foot of a two-foot wide by three-foot deep excavation generates about 0.2 yard of excess material. For an average daily progress of 100 feet, about 20 yards of material (2 truck trips of 10 yards each) may be required to haul away the excess material if traditional construction methods are used. Less material would need to be hauled away if directional drilling were used. The noise impact of less than one truck per hour in and out of the construction area would not measurably increase the noise environment.

Construction of the proposed project could also result in impulsive noise, which might include pavement breaking, handling/placement of steel plates to allow vehicles to drive on trenched areas, and hammering on equipment to affect temporary repairs or to dislodge stuck materials.

Staging area noise generation is not expected to be substantially different from cut-and-cover construction as it entails similarly mobile equipment operations (especially trucks). The staging area is expected to be at or in the road in front of the annexation site, which does not have any residences. Utilization of the staging area would not measurably increase any potential impacts if an adequate source/receiver buffer is maintained.

Even though the project is of a small scale for construction activities, the small source-receiver distance and the very low background noise levels require that noise-abating construction techniques be adopted and implemented.

The following mitigation measures would reduce any short-term noise impacts related to stationary equipment, impulse noise and staging area noise to less-than-significant levels.

Mitigation Measure XI.a.

- Construction activities, including truck access for materials deliveries, shall not occur from 6 p.m. to 7 a.m. on weekdays, 5 pm to 9 am on Saturdays, and all day Sunday, Thanksgiving, and Christmas, except in an emergency.

- All equipment shall be equipped with properly operating mufflers.

- Staging area shall be selected as far from occupied homes as is practical.

- Nocturnal emergency or safety operation of stationary pumps, motors, generators, etc. within 50 feet of a residence will utilize temporary electric line power, or the engine shall be shielded from line of sight to the residence by a temporary barrier.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less-than-significant impact. Applicable policies and standards governing environmental noise and vibration on and around the project area are set forth in the Noise Element of the San Mateo County General Plan and the Noise and Vibration Control Ordinance in the San Mateo County Code. Construction-related activities are not expected to provide significant levels of groundborne vibration. Please see response to Checklist Item XI.a, above, for measures to reduce short-term noise during construction.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No impact. The proposed sewer expansion project would not result in any permanent increase in ambient noise levels in the project vicinity.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-than-significant impact with mitigation incorporation. Temporary noise level increases would occur during the construction period. See response to Checklist Item XI.a, above.

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?

No impact. The project area is not located within an airport land use plan area.

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?

No impact. The project area is not located within the vicinity of a private airstrip.

XII. POPULATION AND HOUSING – *Would the project:*

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)?

Less-than-significant impact. As noted in the Project Description, the proposed project would not involve construction of any new homes or businesses, and therefore, would not directly induce population growth. It would involve extension of sewer lines that has the potential to serve a maximum of 12 lots, 10 of which are currently developed. Only one parcel would be annexed to the WBSD under the proposed project. Inadequate sewer facilities could be a constraint to new development on the parcel proposed for annexation and parcels that could be annexed to the WBSD. Therefore, the proposed sewer extension project could potentially result in indirect growth in the area. If this development were to occur, it could result in additional traffic, geologic, biologic, air quality, visual, and noise impacts. These impacts would be dependent on site-specific development considerations, and are speculative at this time. The amount of growth would be limited by water supply, as discussed in Section XVII.d of this document. This remaining growth constraint, in conjunction with the fact that the area is already substantially developed, renders the project's growth-inducement less than significant. Development of the parcels proposed for annexation would be required to satisfy County of San Mateo requirements regarding development in hillside areas, including grading, geologic, and tree preservation requirements.

Any proposed sewer line extension in the area could result in the creation of new parcels, if owners of the parcels are eligible for subdivision. Of the 12 parcels in or adjacent to the proposed annexation area, 2 parcels do not currently contain residential units. As noted in Section X.b. (Land Use and Planning), based on planning and zoning designations and existing development conditions, for the purposes of this environmental evaluation, it is estimated that in a worst-case scenario 17 new units (12 primary and 5 secondary) could be built in the project area**.** Although no development is proposed as part of the sewer line extension project, it is possible that up to 17 residences could be developed and connected to the sewer system. This amount of new homes would not be considered to represent a substantial population growth. Any development proposed within the project area would be subject to separate review and approval by County staff.

The proposed 8-inch main is larger than necessary to serve the proposed project, but is the standard size used by the WBSD. The 8-inch main is used to provide for easier maintenance and not to provide excess capacity (WBSD, 2001). Any applications for annexations of additional parcels would be subject to WBSD requirements for demonstration of health, safety or other needs for services outside city boundaries. Any future sanitary sewer service connections in the area would be subject to separate review and approval by County staff. In addition, development in the area is restricted to that allowable under County General Plan

and Zoning. Any new parcels (subdivisions) in the project area as an indirect result of the proposed project would represent a less-than-significant impact.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No impact. No housing would be displaced with project implementation.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. The proposed project would not displace any people or housing.

XIII. PUBLIC SERVICES – *Would the project:*

a) 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:

i) Fire protection
ii) Police protection
iii) Schools
iv) Parks
v) Other public facilities

Less-than-significant impact. Annexation of one parcel and sewer line extension would not directly result in additional need for public services. As discussed in XII.a, above, the provision of improved sewer facilities to the project area could offset existing constraints to development caused by the current inadequate septic systems. Elimination of these constraints could make development in the area more likely to occur (although as noted in IX.b. and XII.a, any new subdivision or development would be subject to the requirements of existing designations of the County General Plan and Zoning Ordinance). This indirect impact of increased density in the project area would result in an incremental increase for public services. However, since any proposed development would be subject to separate environmental review and feasibility analyses, the potential incremental increase in demand for public services would not be considered significant.

XIV. RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less-than-significant impact. See discussion under public services (XIII and XII.a, above regarding potential increase in demand for public services, including parks.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No impact. No recreational facilities would be built or expanded with project implementation, nor would demand for such facilities be substantially increased.

XV. TRANSPORTATION AND TRAFFIC – *Would the project:*

a) Exceed the capacity of the existing circulation system, based on applicable measures of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less-than-significant impact. Regional access to the area occurs via Alpine Road and Los Trancos Road. Alpine Road is a two-lane roadway, which serves commercial and scattered residential uses in the Portola Valley. The project area is about 4 miles from I-280 via Alpine Road. Los Trancos Road is also a two-lane roadway, but is narrower and has several sharp curves. The only roadway that would be directly affected by the proposed pipeline construction would be approximately 320 feet of Los Trancos Road and 580 feet of Vista Verde Way. These are narrow winding residential streets and that serve the adjacent properties. There is little or no through traffic on any of these streets, and there are no sidewalks.

Existing Traffic Conditions. No new traffic counts were made for this project; traffic counts were made on Los Trancos Road for the adjacent Los Trancos Woods Area Sewer Annexation Project (WBSD, 2001). Because there has been no major development that would affect traffic volumes in the Los Trancos Woods area, current traffic volumes are expected to be similar to those recorded in 2001. Those data show traffic volumes on Los Trancos Road of about 2,100 vehicles per day, with about 170 trips in the AM peak hour and 220 trips in the PM. Traffic is generally heavier northbound in the AM and southbound in the PM. Those traffic count data shows that the roads in the area currently operate at acceptable Levels of Service based on standards that have been defined by San Mateo County and the Town of Portola Valley

Intersection Operations. The Initial Study for the Los Trancos Sewer Annexation Project (WBSD, 2001) also analyzed unsignalized intersections using the methodology set forth in Chapter 10 of the Highway Capacity Manual that is based on average total delay (seconds/vehicle). As with signalized intersections, there are six levels of service, A through F, which represents conditions from best to worst, respectively. All of the intersections (Los Trancos Road at Buck Meadows Road, Los Trancos Road at Ramona Road, Los Trancos Road at Alpine Road) analyzed functioned at a level of A or B, which ranges from 3.5 to 8 second delays.

Construction Traffic Impacts. Sewer pipeline construction in Los Trancos Road and Vista Verde Way is estimated to last from 4 to 30 days over a period of six weeks utilizing a construction crew with between two and seven workers per day. The work would involve the construction of an 8-inch pipe plus manholes and connections. Typical construction equipment would be utilized, including backhoes (2), excavators (2), a water truck, and a dump truck. A horizontal directional drill may be used instead of excavating trenches. There would also be truck trips that would be hauling spoils and delivering pipe sections. During street restoration there would be a paver and a dump truck at the site. The construction techniques would include having one lane of traffic available at all times. The construction area would be plated over at night, and the affected streets would be restored to normal usage. If the directional drill is used only portions of the pipeline where the drill is working and the manholes would be coned off. The drill digs underground and would not require plating. The contractor would use flag persons as necessary, and follow all required County regulations for traffic control during construction.

Over the construction period, the level of construction activity would vary widely. On peak construction days, which would occur from 4 to 10 days, the traffic generated during the construction of the pipeline is estimated to be about 25 vehicle trips per day, or about 4 trips (2 each direction) during the peak hour during the day. There would be an occasional truck trip delivering materials to the construction site. The

majority of this traffic would access the area via Los Trancos Road from the northwest.

This level of traffic would not cause any roadway or intersection capacity problems in the area. The pipeline contractor would be required to follow the County's standard guidelines for traffic control and safety during construction, but there would not be any other measures required.

Traffic Impacts from Growth Inducement. The annexation and the resulting improvement to the sewer system would in some ways enable the infill of some new residential development. As a result of this annexation, and with the pipeline being available, development on some of the currently vacant lots could become feasible. As noted above, San Mateo County Planning Staff has determined that up to 17 additional units could be built within the project area (see additional discussion in Section XIII, Population and Housing). Were these all to be developed, based on a generation factor of 10 vehicle trips per day per unit, which was used in the Los Trancos Woods Area Sewer Annexation Project (WBSD, 2001), the traffic generation could be an additional 170 vehicle trips per day, or about 16 trips (8 in each direction) during the peak hour. With 640 vehicle trips per day from the 2001 traffic study, the traffic consultants concluded that this level of additional traffic would be barely noticeable, and would not cause any safety or capacity problems in the area. Therefore, the possible 170 daily trips associated with full build-out of the area that could be served by the project would be not be significant and no off-site mitigation measures would be required.

The LOS was calculated at each of the study intersections for the Los Trancos Woods Area Sewer Annexation Project (WBSD, 2001), including traffic from the additional units estimated from growth inducement. With the addition of the project generated traffic, all intersections would continue to operate at their current levels-of-service during all time periods, with only negligible changes in the amount of intersection delay. Therefore, the proposed project, with only 17 additional units estimated, or approximately one-quarter of the units expected from the Los Trancos Woods Area Sewer Annexation Project (WBSD, 2001), would also result in a barely noticeable change in intersection delay. The addition of project traffic would not adversely affect any of the intersections studied. In summary, there would be only a slight change in traffic conditions in the immediate vicinity of the project.

b) Conflict with an applicable congestion management program, including but not limited to, level of service standards and travel demand measures and other standards established by the county congestion management agency for designated roads or highways?

Less-than-significant impact. See also response to XV.a., above. The project is not expected to result in any significant traffic or safety impacts and therefore would not conflict with any congestion management plan. Although ultimate development that would be triggered by the project would slightly increase the traffic volumes in the area, there is no evidence to suggest that this development would result in any adverse impacts to traffic.

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?

No impact. The proposed project would not result in increased air travel.

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

No impact. No new roads or uses are proposed as part of this project.

e) Result in inadequate emergency access?

Less-than-significant with mitigation incorporation. The proposed project would not affect long-term access along local streets. However, construction of the proposed sewer line extension project could obstruct traffic during the construction period. As noted in Item VII.g, above, the WBSD would require preparation of a Traffic Control Plan for the construction period.

Mitigation Measure XV.e: Potential short-term impacts related to inadequate emergency access during construction would be mitigated to less than significant levels with implementation of the following measures:

- Per WBSD requirements, a Traffic Control Plan which outlines all potential lane closures and detours, as necessary, shall be prepared.
- Appropriate signage shall be utilized during construction to warn pedestrians, bicyclists and vehicles of any potential traffic hazards;
- One lane for through traffic shall be maintained to allow access for all project area residents during construction.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No impact. The proposed project would not interfere with the provision of alternative transportation services, and would therefore not conflict with any associated alternative transportation policies. As mentioned, although potential future development in the project area would increase traffic volumes in the Los Trancos Woods neighborhood, this increase would not result in any significant impacts to pedestrians or bicyclists.

XVI. UTILITIES AND SERVICE SYSTEMS – *Would the project:*

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less-than-significant impact. The WBSD provides wastewater collection and conveyance services to unincorporated San Mateo (including Los Trancos Woods) and Santa Clara counties as well as the cities/towns of Portola Valley, Woodside and City of Menlo Park, Atherton, and areas of East Palo Alto. The WBSD conveys raw wastewater, through the Menlo Park Pump Station and force main, to the Silicon Valley Clean Water (SVCW) treatment facility in Redwood City for treatment and discharge to deep-water outlets in the San Francisco Bay (WBSD, 2015).

The proposed sewer extension project would be required to comply with all wastewater treatment requirements mandated by the Regional Water Quality Control Board. See response to Checklist item IX.a. above.

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?

Less-than-significant impact. California Water Service Company (Cal Water), Bear Gulch District would not need to expand water treatment facilities or other structures for the annexation. Homeowners may need to upgrade their water pipelines if remodeling affects water use, such as the installation of fire sprinklers (L. Mathias, *Writ. Comm.*, 2010).

The WBSD has determined that it has sufficient capacity to accommodate annexation of the project area into the WBSD. Current capacity for the entire WBSD SOI is 7.785 million gallons per day (mgd) average dry weather flow, and current flow is approximately 4.5 mgd. In addition, the proposed project area is

already entirely within the WBSD SOI, so that the project area has already been included in the WBSD's growth projections for local treatment capacity. Therefore, the proposed project would not require expansion of existing wastewater treatment facilities (B. Kitajima, *Writ. Comm.*, 2015).

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?

No impact. The proposed project would not involve construction of any new storm water drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less-than-significant impact. Water supply in the project area is provided by Cal Water, Bear Gulch District, which provides domestic water supply to the communities of Portola Valley, Woodside, Atherton, and portions of Menlo Park, Redwood City, and San Mateo County (including Los Trancos Woods). The Bear Gulch District receives 89 percent of its water allotment from the San Francisco Public Utilities District (SFPUC), Water Department, which gets its supply from the Hetch Hetchy reservoir, and 11 percent from a 1,200-acre watershed in Woodside Hills. The latter is treated at a reservoir and treatment plant in Atherton (California Water Service Company, 2015).

No development other than the main pipeline and laterals are proposed as part of this project. However, as noted earlier in this document, based on existing planning designations, the project could allow for development of up to 17 new units. In addition to these potential new dwelling units that could be linked to project implementation, provision of sanitary sewer service could potentially induce additional demand for water at the 10 developed parcels by removing waste disposal constraints which may have been resulting in less water use.

If any conflict with existing utility lines occurs during project construction, relocation of existing utilities, including water lines, may be necessary. Stakes were observed along the northern boundary of the annexation site, which appeared to mark existing or proposed water lines because they connected to newly installed water hydrant (L. Mathias, *Writ. Comm.*, 2015).

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?

Less-than-significant impact. See response to XV.b, above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less-than-significant impact. The proposed project would not generate solid waste on a long-term basis, since no development is proposed as part of this project (see Introduction to this Initial Study). Some solid waste would be generated during construction resulting from dismantling and disposal of existing septic facilities, roadway demolition, as well as excess fill left from excavation. However, this increase in solid waste would not be considered significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less-than-significant impact. The proposed project would not generate solid waste that would exceed limits set forth in federal, state and local statutes. See response to XVI.f, above.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE.

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?

Less than significant impact with mitigation incorporation. As noted throughout the Checklist above, the project area contains some sensitive biological resources. With mitigation identified in this document, the proposed project would not significantly affect local waterways or cause a fish or wildlife species to drop below self-sustaining levels, threaten to eliminate a plant or 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)?

Less than significant impact. The cumulative effect of the proposed project and past, present, and future projects is less than significant. If this annexation and sewer line extension were approved it would not result in a significant cumulative impact because of the minimal number of units involved.

The Los Trancos Woods development, which includes the project area, is also already included in the WBSD SOI and has already been considered in terms of total wastewater treatment capacity. Therefore, the impacts of providing sewer service to 12 parcels would not be considered to have a cumulatively significant effect on wastewater generation.

Completion of the project and potential development of up to 17 additional housing units on vacant and underutilized parcels could add to cumulative water demands on the local service provider (Cal Water). However, Cal Water has indicated that adequate water supply is available for projects in the Los Trancos Woods area, so no mitigation is necessary. Potential cumulative air quality, noise, and traffic impacts related to development of up to 17 additional homes would also be less than significant. No other cumulative impacts would occur.

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

No impact. As noted above in the Environmental Review Checklist, the proposed project would not have any significant environmental effects which could not be mitigated to less than significant levels.

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APPENDIX A: EMISSIONS ESTIMATES AND MODEL ASSUMPTIONS

Vista Verde Sewer Line Extension

Pollutant: CO2

1 **Site Prep**

											On- Site		Off-Site			Total	
EQUIPMENT	hp	LoadFac*	CO2Fac*		Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Excavator	163	0.38	511.69		1	20	work days	6.00	hours/day	190164	3803289					190164	3803289
Excavator	163	0.38	511.69		1	20	work days	6.00	hours/day	190164	3803289					190164	3803289
Backhoe	98	0.37	517.3700		1	20	work days	6.00	hours/day	112559	2251180					112559	2251180
Backhoe	98	0.37	517.3700		1	20	work days	6.00	hours/day	112559	2251180					112559	2251180
Off-Highway Truck (Water)	400	0.38	515.8400		1	20	work days	4.00	hours/day	313631	6272614					313631	6272614
Material/Equipment Delivery Truck	1	1	7030.1646		5	20	work days	0.1	hours/day	3515	70302	1782.0	7.3	65045	1300896	68560	1371198
Worker Commute					5	20	work days	2	trips/day	0	0	312.3	12.4	19365	387306	19365	387306
							Tot (grams)			**922,593**	**18,451,856**			**84,410**	**1,688,202**	**1,007,003**	**20,140,057**
							Tot (lbs)			**2033.9**	**40679.0**			**186.1**	**3721.8**	**2220.0**	**44400.8**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**2220.0**
		Truck: EMFAC 2011 HHD Idle 2015										Worker Commute: EMFAC2011 LDT2 35 mph					

4 **Site Restoration and Demob**

											On- Site		Off-Site			Total	
EQUIPMENT	hp	LoadFac*	CO2Fac*	Engine Tier	Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Paver	84	0.42	509.38		1	20	work days	2	hours/day	35942	718837					35942	718837
Material/Equipment Delivery Truck	1	1	7030.1646		2	20	work days	0.1	hours/day	1406	28121	1782.0	7.3	26018	520358	27424	548479
Worker Commute					2	20	work days	2	trips/day	0	0	312.3	12.4	7746	154922	7746	154922
					* Haul truck trips		**Tot (grams)**			**37,348**	**746,958**			**33,764**	**675,281**	**71,112**	**1,422,238**
							Tot (lbs)			**82.3**	**1646.7**			**74.4**	**1488.7**	**156.8**	**3135.5**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**156.8**
												Worker Commute: EMFAC2011 LDT2 35 mph					

Grand Total Emissions (metric tons) **21.6**

Vista Verde Sewer Line Extension

Pollutant: ROG

1 **Excavating and Shoring**

									On- Site				Off-Site		Total	
EQUIPMENT	hp	LoadFac*	ROGFac*		Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Excavator	163	0.38	0.3837		1	20	work days	6.00	hours/day	143	2852					143	2852
Excavator	163	0.38	0.3837		1	20	work days	6.00	hours/day	143	2852					143	2852
Backhoe	98	0.37	0.5693		1	20	work days	6.00	hours/day	124	2477					124	2477
Backhoe	98	0.37	0.5693		1	20	work days	6.00	hours/day	124	2477					124	2477
Off-Highway Truck (Water)	400	0.38	0.3845		1	20	work days	4.00	hours/day	234	4676					234	4676
Material/Equipment Delivery Truck	1	1	6.3894		5	20	work days	0.1	hours/day	3	64	0.2745	7.3	10	200	13	264
Worker Commute					5	20	work days	2	trips/day	0	0	0.0642	12.4	4	80	4	80
								Tot (grams)		**770**	**15,398**			**14**	**280**	**784**	**15,678**
								Tot (lbs)		**1.7**	**33.9**			**0.0**	**0.6**	**1.7**	**34.6**
		* Equipment: CalEEMod Appendix D						**Tot (lbs/workday)**				Truck: EMFAC2011 HHDT 35 mph					**1.7**
		Truck: EMFAC 2011 HHD Idle 2015										Worker Commute: EMFAC2011 LDT2 35 mph					

2 **Street Restoration**

									On- Site				Off-Site		Total	
EQUIPMENT	hp	LoadFac*	ROGFac*	Engine Tier	Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Paver	84	0.42	0.6831		1	20	work days	2	hours/day	48	964					48	964
Material/Equipment Delivery Truck	1	1	6.3894		2	20	work days	0.1	hours/day	1	26	0.2745	7.3	4	80	5	106
Worker Commute					2	20	work days	2	trips/day	0	0	0.0642	12.4	2	32	2	32
					* Haul truck trips			**Tot (grams)**		**49**	**990**			**6**	**112**	**55**	**1,102**
								Tot (lbs)		**0.1**	**2.2**			**0.0**	**0.2**	**0.1**	**2.4**
		* Equipment: CalEEMod Appendix D						**Tot (lbs/workday)**				Truck: EMFAC2011 HHDT 35 mph					**0.1**
												Worker Commute: EMFAC2011 LDT2 35 mph					

Grand Total Emissions (lbs/workday) **1.8**

Vista Verde Sewer Line Extension

Pollutant: PM25

1 **Site Prep**

									On- Site		Off-Site				Total	
EQUIPMENT	hp	LoadFac*	PM25Fac*		Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Excavator	163	0.38	0.2035		1	20	work days	6.00	hours/day	76	1513					76	1513
Excavator	163	0.38	0.2035		1	20	work days	6.00	hours/day	76	1513					76	1513
Backhoe	98	0.37	0.3904		1	20	work days	6.00	hours/day	85	1699					85	1699
Backhoe	98	0.37	0.3904		1	20	work days	6.00	hours/day	85	1699					85	1699
Off-Highway Truck (Water)	400	0.38	0.1591		1	20	work days	4.00	hours/day	97	1935					97	1935
Material/Equipment Delivery Truck	1	1	0.2806		5	20	work days	0.1	hours/day	0	3	0.0870	7.3	3	63	3	66
Worker Commute					5	20	work days	2	trips/day	0	0	0.0477	12.4	3	59	3	59
							Tot (grams)			**418**	**8,360**			**6**	**123**	**424**	**8,483**
							Tot (lbs)			**0.9**	**18.4**			**0.0**	**0.3**	**0.9**	**18.7**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**0.9**
		Truck: EMFAC 2011 HHD Idle 2015										Worker Commute: EMFAC2011 LDT2 35 mph					

4 **Site Restoration and Demob**

									On- Site		Off-Site				Total	
EQUIPMENT	hp	LoadFac*	PM25Fac*	Engine Tier	Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Paver	84	0.42	0.4794		1	20	work days	2	hours/day	34	677					34	677
Material/Equipment Delivery Truck	1	1	0.2806		2	20	work days	0.1	hours/day	0	1	0.0870	7.3	1	25	1	27
Worker Commute					2	20	work days	2	trips/day	0	0	0.0477	12.4	1	24	1	24
					* Haul truck trips		**Tot (grams)**			**34**	**678**			**2**	**49**	**36**	**727**
							Tot (lbs)			**0.1**	**1.5**			**0.0**	**0.1**	**0.1**	**1.6**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**0.1**
												Worker Commute: EMFAC2011 LDT2 35 mph					

Grand Total Emissions (lbs/workday) **1.0**

Vista Verde Sewer Line Extension

Pollutant: PM10

1 **Site Prep**

									On- Site		Off-Site				Total	
EQUIPMENT	hp	LoadFac*	PM10Fac*		Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Excavator	163	0.38	0.2212		1	20	work days	6.00	hours/day	82	1644					82	1644
Excavator	163	0.38	0.2212		1	20	work days	6.00	hours/day	82	1644					82	1644
Backhoe	98	0.37	0.4244		1	20	work days	6.00	hours/day	92	1847					92	1847
Backhoe	98	0.37	0.4244		1	20	work days	6.00	hours/day	92	1847					92	1847
Off-Highway Truck (Water)	400	0.38	0.1730		1	20	work days	4.00	hours/day	105	2104					105	2104
Material/Equipment Delivery Truck	1	1	0.3050		5	20	work days	0.1	hours/day	0	3	0.0945	7.3	3	69	4	72
Worker Commute					5	20	work days	2	trips/day	0	0	0.0519	12.4	3	64	3	64
							Tot (grams)			**454**	**9,088**			**7**	**133**	**461**	**9,222**
							Tot (lbs)			**1.0**	**20.0**			**0.0**	**0.3**	**1.0**	**20.3**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**1.0**
		Truck: EMFAC 2011 HHD Idle 2015										Worker Commute: EMFAC2011 LDT2 35 mph					

4 **Site Restoration and Demob**

									On- Site		Off-Site				Total	
EQUIPMENT	hp	LoadFac*	PM10Fac*	Engine Tier	Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Paver	84	0.42	0.4794		1	20	work days	2	hours/day	34	677					34	677
Material/Equipment Delivery Truck	1	1	0.3050		2	20	work days	0.1	hours/day	0	1	0.0945	7.3	1	28	1	29
Worker Commute					2	20	work days	2	trips/day	0	0	0.0519	12.4	1	26	1	26
					* Haul truck trips		**Tot (grams)**			**34**	**678**			**3**	**53**	**37**	**731**
							Tot (lbs)			**0.1**	**1.5**			**0.0**	**0.1**	**0.1**	**1.6**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**0.1**
												Worker Commute: EMFAC2011 LDT2 35 mph					

Grand Total Emissions (lbs/workday) **1.1**

Vista Verde Sewer Line Extension

Pollutant: NOX

Excavating and Shoring

										On- Site				Off-Site		Total	
EQUIPMENT	hp	LoadFac*	NOXFac*		Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Excavator	163	0.38	4.4807		1	20	work days	6.00	hours/day	1665	33304					1665	33304
Excavator	163	0.38	4.4807		1	20	work days	6.00	hours/day	1665	33304					1665	33304
Backhoe	98	0.37	5.4221		1	20	work days	6.00	hours/day	1180	23593					1180	23593
Backhoe	98	0.37	5.4221		1	20	work days	6.00	hours/day	1180	23593					1180	23593
Off-Highway Truck (Water)	400	0.38	4.5279		1	20	work days	4.00	hours/day	2753	55059					2753	55059
Material/Equipment Delivery Truck	1	1	66.2397		5	20	work days	0.1	hours/day	33	662	7.3028	7.3	267	5331	300	5993
Worker Commute					5	20	work days	2	trips/day	0	0	0.6150	12.4	38	763	38	763
							Tot (grams)			**8,476**	**169,515**			**305**	**6,094**	**8,780**	**175,609**
							Tot (lbs)			**18.7**	**373.7**			**0.7**	**13.4**	**19.4**	**387.1**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**19.4**
		Truck: EMFAC 2011 HHD Idle 2015										Worker Commute: EMFAC2011 LDT2 35 mph					

Street Restoration

										On- Site				Off-Site		Total	
EQUIPMENT	hp	LoadFac*	NOXFac*	Engine Tier	Quantity	DURATION	UNIT	DURATION	UNIT	DayEmis	TotEmis	Emfac	Length	DayEmis	TotEmis	DayEmis	TotEmis
Paver	84	0.42	6.141		1	20	work days	2	hours/day	433	8666					433	8666
Material/Equipment Delivery Truck	1	1	66.2397		2	20	work days	0.1	hours/day	13	265	7.3028	7.3	107	2132	120	2397
Worker Commute					2	20	work days	2	trips/day	0	0	0.6150	12.4	15	305	15	305
					* Haul truck trips		**Tot (grams)**			**447**	**8,931**			**122**	**2,437**	**568**	**11,369**
							Tot (lbs)			**1.0**	**19.7**			**0.3**	**5.4**	**1.3**	**25.1**
		* Equipment: CalEEMod Appendix D					**Tot (lbs/workday)**					Truck: EMFAC2011 HHDT 35 mph					**1.3**
												Worker Commute: EMFAC2011 LDT2 35 mph					

Grand Total Emissions (lbs/workday) **20.6**

APPENDIX B: BIOLOGICAL RESOURCES REPORT

Biological Resources Technical Report

Vista Verde Way Annexation to West Bay Sanitary District and Sewer Line Extension

April 2015

Prepared for:

San Mateo County Local Agency Formation Commission
455 County Center, 2nd Floor
Redwood City, CA 94063-1663

Prepared by:

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Introduction and Summary

This biological resources technical report presents the results of a background information review, site reconnaissance, and assessment of biological resources located within and immediately adjacent to the proposed Vista Verde Sewer Line Extension Project site (project site). The project site is located within a residential area just south of Portola Valley, CA. Dominant plant species at the site are woodland species. No special-status plant or animal species[1] were identified during the survey, and no additional surveys for special-status species are recommended. No wetlands or riparian areas were identified at the site proposed for annexation, but any crossings of sewer line connectors on adjacent properties with creeks or potential wetland features may require approvals from federal and state agencies. The main sewer line would be placed under the road and would not directly affect biological resources.

The purpose of this report is to review the proposed project in order to determine if there would be any effects on biological resources, including native plant habitats, stream resources, "significant trees," or threatened, endangered, or other sensitive plant and animal species. The focus of the analysis is on the areas that would be affected by construction of the pipelines.

This report has been prepared to support the California Environmental Quality Act (CEQA) documentation process conducted by the Lead Agency, San Mateo County Local Agency Formation Commission (LAFCO). The proposed annexation is also subject to approval by the West Bay Sanitary District (WBSD), the Responsible Agency under CEQA. As discussed below, the assessment includes impact analysis and recommended mitigation measures.

Project Location and Description

The project area is within Los Trancos Woods, an unincorporated community of the located in San Mateo County, California (see Figure 1 Appendix A). Los Trancos Woods is heavily wooded and hilly, with most lots developed with single-family homes. It is within the Mindego Hill 7.5-minute US Geological Survey quadrangle (quad). The site ranges in elevation from approximately 1,160 feet to 1,250 feet (350 meters to 380 meters) above mean sea level.

The proposed project is to annex a 1.174-acre property (Assessor's Parcel Number 080-233-040) to the West Bay Sanitary District's (WBSD) Service Area (Figure 2, Appendix A). A sewer line would be extended from Los Trancos Road to the annexation parcel in Vista Verde Way. The proposed sewer line extension also has the potential to serve eleven additional adjacent parcels, which are currently not proposed for annexation. The parcel proposed for annexation and one of the other eleven parcels are vacant, while the remaining 10 parcels

[1] For purposes of this report, special-status species include federally- and state-listed endangered, threatened, or rare species, species proposed or candidates for state or federal listing as endangered, threatened, or rare, and species that meet CEQA Guidelines, Section 15380 criteria for endangered, rare, or threatened species, as well plants on CNPS's List 1B and List 2 and animals listed by CDFG as a Species of Special Concern.

are developed with residences. All developed parcels in the project area are served by existing septic systems, and are within the WBSD Sphere of Influence (SOI).

The proposed sewer system would be comprised of about 900-feet of an 8-inch gravity-flow pipeline and associated manholes in Los Trancos Road and Vista Verde Way, as well as 4-inch laterals and cleanout facilities extending to each lot or house to be served. Some on-site connections for downslope lots would require ejector pumps. No pump stations or grinder pumps are proposed. Currently, only the property proposed for annexation, which is upslope from the main and would not require a pump, would connect to the main pipeline. The proposed sewer line extension is shown in Figure 2.

Background Data and Literature Review

Prior to conducting the site survey, information on special-status species that may be found at the site was collected. The primary data source was the California Natural Diversity Data Base (CNDDB) (CDFG 2015). This database was searched for all known sightings of sensitive species within the Mindego Hills, La Honda, Palo Alto, and Cupertino USGS 7.5 minute topographic quad maps. The online database of the California Native Plant Society (CNPS), *Inventory of Rare and Endangered Plants (online edition)* (CNPS 2015) also was searched for plant species within the Mindego Hills quad maps and nine surrounding quad maps.

Background information evaluated includes the biological report for the 179 Los Trancos project (Marangio 2010) that the proposed project would connect to, and the Ascension Heights Subdivision Project (San Mateo County 2014), approximately 15 miles north of the project site.

Site Survey Methods

Jane Steven, project biologist, conducted a reconnaissance-level survey on March 2, 2015. The survey was conducted to assess current biological conditions, identify vegetation communities at the sites that could support special status species, and, if possible, identify if any special status species were present. The survey was conducted between 10 am and 12 pm. General site conditions, including vegetation and evidence of wildlife, were observed and are summarized below. Photographs of the site are presented in Appendix B.

Existing Conditions

The general area of the proposed and potential annexation properties consists of a rural residential community. It includes the 1.2-acre site that is proposed for annexation as well as 11 adjacent parcels that could be annexed into the WBSD Service Area. The 1.2-acre site is undeveloped and has a fairly steep slope. At the time of the survey the northern

boundary was marked with wooden stakes and flags that connected to newly installed water hydrant. Other two-foot square areas also were staked at the site.

The vegetation at the 1.2-acre site can be characterized as a forest or woodland, such as cismontane woodland or broadleaved upland forest (CNDDB/Holland) or more specifically as black oak-madrone-coast live oak association (Allen et al. 1991), as described in Sawyer, Keeler-Wolf, and Evens 2009. The forest/woodland at the site consists primarily of an overstory of large black oak (*Quercus kelloggii)*, coast live oak (*Quercus agrifolia*), and madrone trees (*Arbutus menziesii*). Native shrubs include poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), and California blackberry (*Rubus ursinus*). Non-native French broom (*Genista monspessulana*), an invasive exotic species, has also spread on the site, especially on the lower portion nearer the road (California Invasive Plant Council 2015).[2] Herbaceous species include native plants, such as miner's lettuce (*Claytonia perfoliata* ssp. *mexicana*), wood fern (*Dryopteris arguta*), Pacific hound's tongue (*Cynoglossum grande*), and soaproot (*Chloragallum pomeridianum*). Non-native herbaceous species, such as prickly lettuce (*Lactuca serriola*), wild geranium (*Geranium molle*), and milk thistle (*Silybum marianum*), were observed also primarily nearer the road.

The other properties that can potentially be annexed have also retained elements of the native oak and mixed evergreen forest plant communities that were present before development. In addition to the species listed above, there are numerous large native California bay (*Umbellularia californica*), coast live oak, blue oak (*Quercus douglasii*), black oak, and big-leaf maple trees (*Acer macrophyllum*). In addition, home owners have planted a wide variety of non-native landscape plants. Where native understory plants remain, they consist of such species as toyon (*Heteromeles arbutifolia*), snowberry (*Symphoricarpos albus*), and sword fern (*Polystichum munitum*). Introduced English ivy (*Hedera helix*), periwinkle (*Vinca major*), dandelion (*Taraxacum officinale*) and Bermuda buttercup (*Oxalis pes-caprae*) and non-native grasses such as wild oat (*Avena fatua*) and ryegrass (*Festuca perennis*) are also present (Marangio 2010).

Wildlife observed within the project area includes several common species of birds including scrub jay (*Aphelocoma californica*), chestnut-backed chickadee (*Poecile rufescens*), American crow (*Corvus brachyrhynchus*). Four black-tailed deer (*Odocoileus hemionus columbianus*) were observed browsing at the annexation site. Many other common wildlife species would be expected to utilize the annexation area and adjacent properties along the project site boundary, including gray squirrel (*Sciurus griseus*), mourning dove (*Zenaida macroura*),

[2] French broom is rated as a "high" level of invasiveness. High is defined as "These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically (California Invasive Plant Council 2015)."

Anna's hummingbird (*Calypte anna*), slender salamander (*Batrachoseps attenuates*), and southern alligator lizard (*Elgaria maulticarinata*).

Special-Status Species

Plants

No special-status plant species were observed at the site during the survey. Most special-status plant species observed within a radius of approximately five miles from the proposed project site are not likely to be found at the site because of lack of appropriate habitat, such as chaparral, scrub, wetlands, grassland, serpentine soils, or sandy soils; or have most likely been extirpated, as indicated in Table C-1 in Appendix C. Some species also are found at lower elevations. Three special-status plant species have been found in similar habitats to the project site and may be found there.

Western leatherwood (*Dirca occidentalis*) typically grows in broadleaved upland forest and cismontane woodland, which are the plant communities at the project site. In addition, several populations have been observed within five miles of the project site. The closest known occurrence is 0.6 miles to the north. This species is listed on the California Native Plant Society's (CNPS's) list as 1B.2, "fairly endangered in California" (CDFW 2015a). Western leatherwood blooms between January and April (CNPS 2015). Field surveys were conducted during the blooming period of this plant, and any in the study area would have been readily identifiable. However, no Western leatherwood plants were observed.

Fragrant fritillary (*Fritillaria liliacea*) grows in cismontane woodland and other habitats. It is oftentimes found in serpentine soils, which are not present at the project site. It is identified as 1B.2 (fairly endangered in California) on the CNPS list (CDFW 2015a). This species would have been blooming at the time of the survey and was not observed at the project site.

Arcuate bush mallow (*Malacothamnus arcuatus*), also a CNPS 1B.2 species, grows in chaparral and cismontane woodland at sites from 15 to 355 meters in elevation. The woodland at the project site could provide habitat, although there is no chaparral, which this species also grows in. Bush mallow is mostly found elevations that are lower than the project site, which reduces its likelihood of being found at the site (CDFW 2015a). Although this species blooms outside the survey time, it would have been identifiable to Genus. No mallows were observed at the site.

Animals

No special-status wildlife species were observed during the site survey. Most special- status animals observed within a radius of approximately five to ten miles from the proposed project site are not likely to be found at the site because of lack of appropriate habitat such as wetlands, streams, riparian areas, grasslands, deserts, or scrublands, serpentine soils, or friable soils, or have most likely been extirpated, as indicated in Table C-2 in Appendix C. Two bat species and a rodent may be found at or near the project site. Additional information is provided regarding a frog species because several occurrences have been recorded within five miles of the project site and frogs use upland areas to migrate between ponds and waterways.

California red-legged frog (*Rana draytonii*) is federally listed as Threatened and is a California Species of Special Concern. It is typically found in deep-water pools of ponds and streams with fringes of dense, emergent vegetation or dense shrubby vegetation, such as cattails and willows. The closest breeding habitat for California red-legged frogs (CRLF) is at Big Springs, approximately 2.7 miles southwest of the project site. Near Big Springs several observations of CRLF have been made at a cluster of lakes and creeks (Mindego Lake, Knuedler Lake, Tarwater Creek, and Peters Creek (CDFW 2015a). California red-legged frogs have been observed to travel over land up to 1.7 miles (Fellers and Kleeman, 2007). The swale between 1260 Los Trancos Road and 281 Vista Verde Way would not provide habitat for the CRLF because it does not have any ponded water or dense vegetation. Approximately 1,250 feet north of the annexation area, and adjacent to where the sewer pipeline would connect to the existing pipeline, there is a seasonal stream channel, but it also does not provide the habitat requirements necessary for this species. Because there is no breeding habitat within or adjacent to the project study area, and because no nearby breeding ponds are known, it is unlikely that California red-legged frogs would be present within the project study area. Because of the lack of habitat within two miles of the project site, it is also unlikely to be an upland dispersal site.

Two species of bats that are California Species of Special Concern, pallid bat (*Antrozous pallidus*) and Townsend's big-eared bay (*Corynoryhinus townsendii*) may be found in hollow trees or unoccupied buildings within the project area. They are unlikely to be found at the annexation site because there are no buildings and no hollow trees were observed. These species are very sensitive to human disturbance, so the likelihood of a building adjacent to the project area being unused to the point of providing habitat is very unlikely.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectans*) is a California Species of Special Concern. It is found in forest habitat of moderate canopy with moderate to dense understory. The presence of this species is readily apparent because they build stick nests of twigs on the ground and at the base and in trees in oak woodlands and riparian areas. No stick nests are present on the ground in the project study area.

Federal Migratory Bird Treaty Act

The annexation site and properties adjacent to the sewer line extension that may be annexed to the WBSD in the future have large trees and shrubs that have the potential to support nesting migratory birds. The Migratory Bird Treaty Act (MBTA) makes it illegal for people to "take" migratory birds, their eggs, feathers or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. Birds protected under the MBTA include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows and others, including their body parts (feathers, plumes etc.), nests, and eggs. A large nest was observed in one of the trees at the annexation site, and was most likely a squirrel nest.

Sensitive Natural Communities

There were no sensitive natural communities, including wetlands, waterways, or waterbodies on the property to be annexed. There is a natural grassy swale between 1260 Los Trancos Road and 281 Vista Verde Way. These properties border the road where the main pipeline would be extended and could annex to the WBSD. There was no water flowing in the swale at the time of the survey and no other obvious hydrologic indicators. It didn't appear to continue across the road, or connect to other waterways. There was no obvious change in the vegetation to wetland or riparian species. It does, however, have a fairly defined bed and banks.

Although this swale is not likely to be considered a jurisdictional wetland or stream by the US Army Corps of Engineers (Corps), California Department of Fish and Wildlife, or Regional Water Quality Control Board (RWQCB), a formal delineation would be required to determine federal and state jurisdiction. Disturbance to bed and banks of stream channels, including intermittent streams, requires a Lake and Streambed Alteration Agreement from CDFG, and related water quality impacts would require a 401 Certification from the Regional Water Quality Control Board (RWQCB).

Heritage Trees

Trees within the annexation site and on other properties that may be annexed to the WBSD may be protected under the San Mateo County Heritage Tree Ordinance (San Mateo County 1977). Heritage trees observed at the project site include bigleaf maple, madrone, coast live oak, black oak, blue oak, and California bay of varying sizes, depending on the species.

Impacts

Construction of the 8-inch pipeline in the roadways would not have significant biological impacts because the area is paved and does not support any special-status plant or animal species. Because of the disturbed nature of both the undeveloped and developed properties under consideration in this report, and the small linear footprint of the area that would be affected by excavation for and placement of the 4-inch lateral pipes that would connect the houses to the sewer system, construction of the laterals would also have little effect on the biological community. It is possible that some of these laterals would pass through undeveloped areas; however, the absence of special-status species in these sites would result in a less-than-significant level of impact.

The implementation of the project would not interfere 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. Construction noise may temporarily disturb migratory birds, but it would be off and on for six weeks, would move during that time period as construction of the pipeline or lateral progresses, and most of all of the species in this residential area are adapted to noise from housing construction on nearby lots, typical residential noise such as gardening equipment, or traffic.

Construction of the main pipeline and lateral to the annexation site would not affect the swale or any other wetlands or sensitive natural communities. Installation of laterals to 1260 Los Trancos Road or 281 Vista Verde Way could affect the swale if the area is not avoided. Disturbance within the natural grassy swale between 1260 Los Trancos Road and 281 Vista Verde Way could potentially require Army Corps of Engineers under Section 404 of the Clean Water Act and Section 401 from the RWQCB or a Lake and Streambed Alteration Agreement from the CDFW.

Large trees on the annexation property could be damaged or killed during construction of the lateral pipeline at the heavily wooded annexation site. Significant trees are protected by County of San Mateo Heritage Tree Ordinance and require permits to remove, destroy, or trim the trees.

Mitigation Measures

1. The lateral pipeline on the annexation site shall be aligned to avoid damage to or losses of trees protected by the San Mateo County Heritage Tree Ordinance. Where damage or loss is unavoidable, a county permit would be obtained. Any impacts would be mitigated as a result.

2. The swale between 1260 Los Trancos Road and 281 Vista Verde Way shall be avoided. If it is necessary to cross the swale, a wetland delineation shall be required to evaluate whether it is under the jurisdiction of federal or state agencies, and any appropriate permits shall be obtained. Best Management Practices shall be implemented if there is potential for erosion and sedimentation effects.

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Appendix A

Vicinity and Site Maps

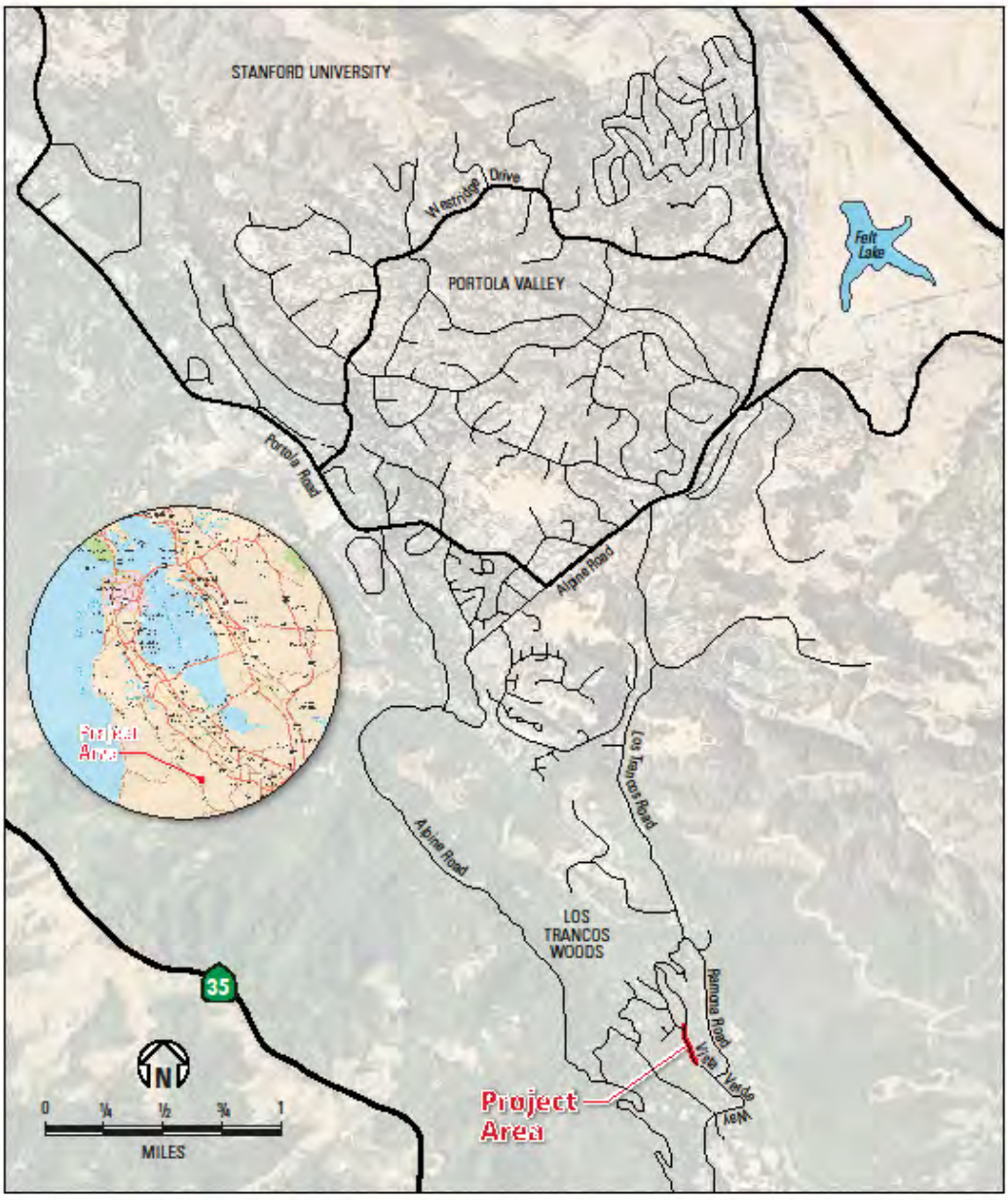


Figure 1

Project Location

Source: Grassetti Environmental, TomTom and Bay City Guide Maps

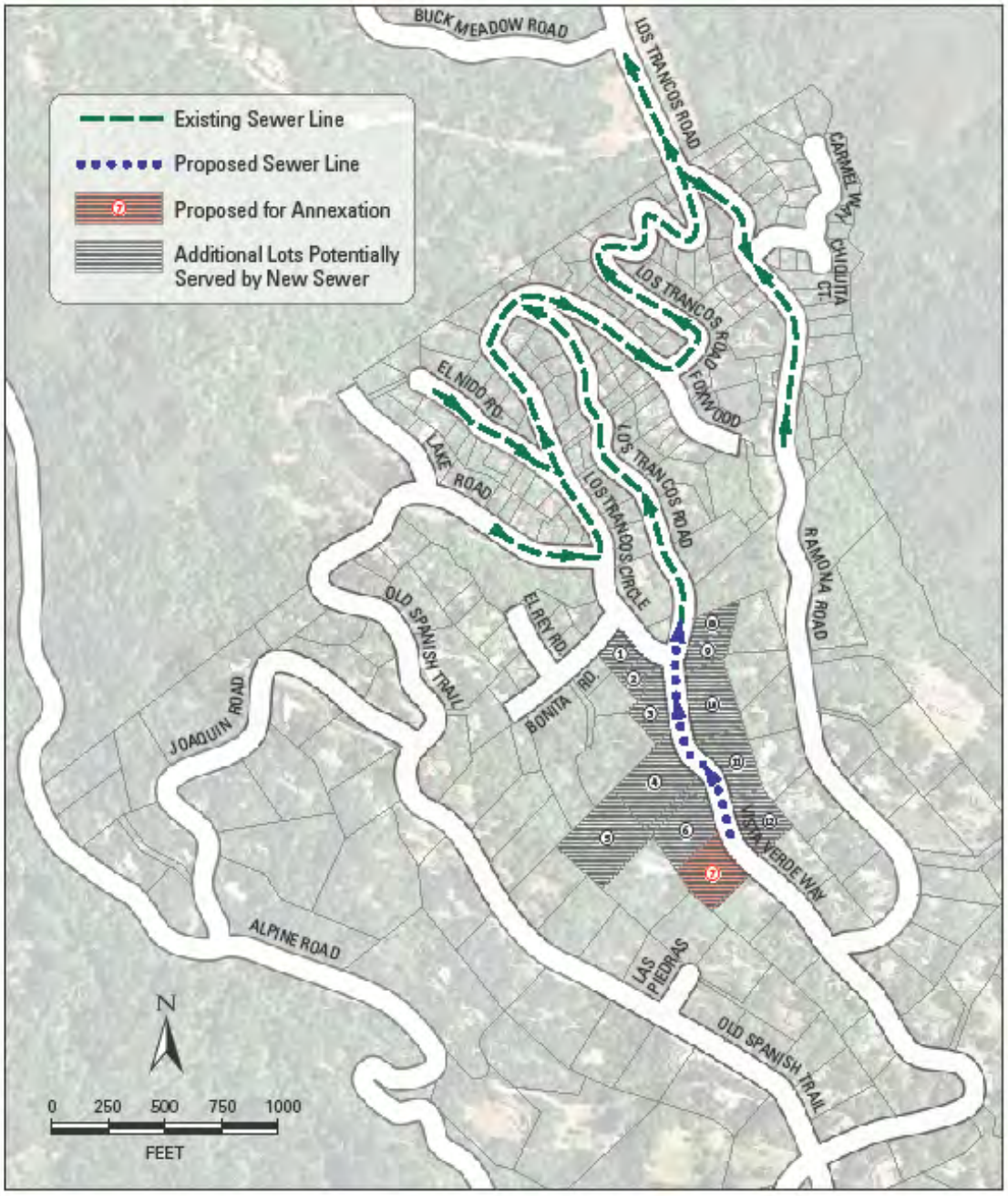


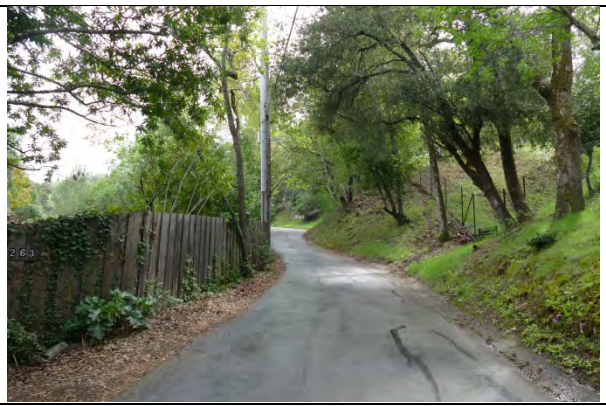
Figure 2

Proposed New Sewer Line
and Potential New Service Area

Source: San Mateo County LAFCO

Appendix B

Site Photographs

	
Dense woodland vegetation looking upslope at annexation site from Vista Verde Way	Pacific hound's tongue (annexation site)
	
Large coast live oak (annexation site)	Black-tailed deer (annexation site)
	
Swale between 1260 Los Trancos Road and 281 Vista Verde Way	Looking south with swale on the right and fence for 1263 Los Trancos Road on the left

Appendix C

Special Status Species Tables

Table C-1: Special Status Plant Species Reported within the Vicinity of the Project Site and Potential to Occur

Species	Listing Status*			Blooming Period	Habitat and Elevation[1]	Likelihood of Occurrence within Project Area
	Federal	State	CNPS			
Allium peninsulare var. *franciscanum* Franciscan onion	_	_	1B.2	April-June	Volcanic, often serpentinite soils of cismontane woodland and valley and foothill grassland/clay from 52-300 meters elevation	Not likely; there are no serpentine soils on the project site.
Arctostaphylos andersonii Santa Cruz manzanita	-	-	1B.2	November-April	Perennial evergreen shrub found in openings and edges in broad-leafed upland forest, chaparral, and north coast coniferous forest from 60-730 meters elevation	Not likely; no manzanita species were observed within the project site.
Arctostaphylos regismontana Kings Mountain manzanita	-	-	1B.2	January-April	Granitic or sandstone soils in broad-leafed upland forest, chaparral, and north coast coniferous forest from 305-730 meters elevation.	Not likely; no manzanita species were observed within the project site.
Astragalus pycnostachyus var. *pycnostachyus* coastal marsh milk-vetch	-	-	1B.2	April-October	Mesic coastal dunes, coastal scrub, and in streamsides and coastal salt marshes and swamps from 0-30 meters elevation	Not likely; the project site occurs above the known elevation range for this species and has no coastal scrub or wetlands.
Cirsium fontinale var. *fontinale* Crystal Springs fountain thistle	-	-	1B.1	April-October	Serpentinite seeps of chaparral (openings), cismontane woodland, and valley and foothill grassland from 45-175 meters elevation	Not likely; there are no serpentine soils on the project site.

[1] The pipeline project site, including the annexation area ranges from approximately 350 meters to 380 meters.

Species	Listing Status*			Blooming Period	Habitat and Elevation[1]	Likelihood of Occurrence within Project Area
	Federal	State	CNPS			
Collinsia multicolor San Francisco collinsia	-	-	1B.2	March-May	Found in closed-cone coniferous forest and coastal scrub/sometimes serpentinite from 30-250 meters elevation	Not likely; there is no coniferous forest or coastal scrub habitat or serpentine soils at the project site.
Dirca occidentalis western leatherwood	-	-	1B.2	January-April	Broadleafed upland forest, closed cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland/mesic from 50-395 meters elevation	Possible; the project site may provide habitat for this species, but none were observed during the site survey, which was conducted during the blooming period and would have been readily identifiable.
Eriogonum nudum var. *decorans* Ben Lomond buckwheat	-	-	1B.1	June-October	Sandy, chaparral, cismontane woodland, lower montane coniferous forest (maritime ponderosa pine sandhills) from 50 - 800 meters elevation	Not likely; the project site does not have sandy soils that this species prefers.
Eriophyllum latilobum San Mateo wooly sunflower	FE	CE	1B.1	May-June	Cismontane woodland, often in serpentine soil on roadcuts, from 45-150 meters elevation	Not likely; although habitat is present, the species had been found at lower elevations than the project site.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	-	-	1B.1	June - August	Vernal pools, alkaline depressions, roadside ditches, and other wet places near the coast from 3-45 meters elevation	Not likely; there are no vernal pools other wet areas at the project site.

Species	Listing Status*			Blooming Period	Habitat and Elevation[1]	Likelihood of Occurrence within Project Area
	Federal	State	CNPS			
Fissidens pauperculus Minute pocket moss	-	-	1B.2	N/A	North Coast coniferous forest (damp coastal soil), shaded and seasonally wet silt outcrop, in streamlet from 10 - 1024 meters	Not likely; the project site is not dominated by conifers and there are no streambeds with rocky bottoms.
Fritillaria liliacea Fragrant fritillary	-	-	1B.2	February-April	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grasslands/often serpentinite from 3-410 meters elevation	Possible; this species would have been blooming at the time of the survey and was not observed at the project site.
Hesperolinon congestum Marin western flax	FT	CT	1B.1	April-July	Found in chaparral and valley and foothill grassland/serpentinite from 5-370 meters elevation	Not likely; there are no serpentine soils on the project site.
Hoita strobilina Loma Prienta hoita	-	-	1B.1	May - October	Chaparral, cismontane, woodland, riparian woodland, serpentine, mesic sites at 30-860 meters in elevation	Not likely; there are no serpentine soils on the project site.
Legenere limosa Legenere	-	-	1B.1	April - June	Vernal pools from 1-880 meters elevation	Not likely; there are no vernal pools at the site
Malacothamnus arcuatus Arcuate bush mallow	-	-	1B.2	April-September	Chaparral and cismontane woodland from 15-355 meters elevation	Possible; woodland present on the project site could provide habitat for this species. However, it is generally found at lower elevations and there is no chaparral habitat at the project site. No mallows were observed at the project site.

Species	Listing Status*			Blooming Period	Habitat and Elevation[1]	Likelihood of Occurrence within Project Area
	Federal	State	CNPS			
Malacothamnus davidsonii Davidson's bush-mallow	-	-	1B.2	June-January	Chaparral, cismontane woodland, coastal scrub, and riparian woodland from 185–855 meters elevation	Not likely. There is no riparian woodland at the project site. The closest species was last observed in the foothills near Stanford in 1936.
Monolopia gracilens Woodland woolythreads	-	-	1B.2	February-July	Serpentine soils of broadleafed upland forest openings, chaparral openings, cismontane woodland, North Coast coniferous forest openings and valley and foothill grassland from 100-1200 meters elevation	Not likely; there are no serpentine soils on the project site.
Pedicularis dudleyi Dudley's lousewort	-	CR	1B.2	April-June	Chaparral, cismontane woodland, North Coast coniferous forests, and valley and foothill grasslands deep shadey woods of older coast redwood forests from 60-900 meters elevation	Not likely; the project site does not have redwood trees or other plant species where colonies have been observed.
Piperia candida White-flowered rein orchid	-	-	1B.2	March - September	Broadleafed upland forest, lower montane coniferous forest, and North Coast coniferous forest. Sometimes serpentinite, forest duff, mossy banks, rock outcrops, and muskeg from 0-1200 meters elevation	Not likely; the project site habitat is marginal for this species due to disturbance and lack of serpentine soils. The project site does not have the dominant plant species (eg. *Sequoia sempervirens, Lithocarpus densiflorus, Myrica californica*) observed at a site nearby (one mile to the southeast) with this species.

Species	Listing Status*			Blooming Period	Habitat and Elevation[1]	Likelihood of Occurrence within Project Area
	Federal	State	CNPS			
Plagiobothrys chorisianus var. *chorisianus* Choris' popcorn-flower	-	-	1B.2	March-June	Chaparral, coastal prairie, and coastal scrub/mesic from 15-160 meters elevation	Not likely; the site is at a higher elevation than this species is found and does not provide habitat.
Trifolium amoenum Showy rancheria clover, two fork clover	FE	-	1B.1	April - June	Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite), open sunny sites, swales, roadside and eroding cliff face from 5-415 meters elevation	Not likely; the project does not have scrub or grassland habitat or serpentine soils.

*Listing Status

Federal Listing
FT: Federally threatened
FE: Federally endangered
State Listing
SE: State endangered
SR: State rare
California Native Plant Society Listing
1A: Presumed extinct in California
1B: Rare, threatened, and endangered in California and elsewhere
1B.1 Seriously endangered in California
1B.2 Fairly endangered in California
2: Rare, threatened, or endangered in California, but more common elsewhere

Sources

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Table C-2: Special Status Wildlife Species Reported within the Vicinity of the Project Site and Potential to Occur

Species	Listing Status[1]	Habitat Association[1]	Likelihood of Occurrence within Project Area
Invertebrates			
Euphydryas editha bayensis Bay checkerspot butterfly	FT	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Orthocarpus densiflora* and *O. purpurscens* are the secondary host plants.	Not likely; this project site does not provide habitat for this species. The site is wooded and does not have serpentine soils, and host plants were not observed.
Speyeria zerene myrtleae Myrtle's silverspot butterfly	FE	Coastal dunes, coastal bluff scrub, non-native annual grassland, and coastal prairie habitats. Larval food plant is western dog violet (*Viola adunca*). Adults also feed on gumplant (*Grindelia* sp.), yellow sand verbena (*Abronia latifolia*), monardella (*Monardella* sp.), bull thistle (*Cirsium vulgare*), and seaside daisy (*Erigeron glaucus*). Prefers areas that are protected from onshore winds with ample winter rainfall and frequent fog. Elevations range from 0 to 300 meters. Habitat must be within 3 miles of the coast.	Not likely. The site is too far from the coast for this species. In addition, this species is believed to be extirpated south of the Golden Gate Bridge as of the late 1970's.
Amphibians and Reptiles			
Ambystoma californiense California tiger salamander	FT, ST, CSC	Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding. Most populations found below 1,500 feet, though have been recorded up to 4,500 feet.	Not likely; There is no habitat for this species at the project site. There are no seasonal wetlands or vernal pools on the site or nearby.

[1] The pipeline project site, including the annexation area ranges from approximately 350 meters to 380 meters.

Species	Listing Status[1]	Habitat Association[1]	Likelihood of Occurrence within Project Area
Rana draytonii California red-legged frog	FT, CSC	Inhabits lowlands and foothills in or near permanent deep water with dense growth of emergent and woody riparian vegetation, bordering permanent and semi-permanent ponds, ponded streams, marshes, and springs. Requires 11 to 20 weeks of permanent water for larval development. Upland habitat surrounding breeding areas is important for shelter during dispersal and aestivation.	Not likely; the closest breeding habitat is from Big Springs about 2.7 miles southwest. There is no suitable aquatic habitat at the project site, and the project site is not in between ponds, so it is unlikely to be an upland dispersal area.
Rana boylii Foothills yellow-legged frog	SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Some cobble-sized substrate is needed for egg-laying.	Not likely; there is no habitat for this species at the project site, and there was only one occurrence approximately 5 miles south of the project site.
Emys marmorata Western pond turtle	CSC	Found in rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters from sea level to 6,500 feet. Prefers habitats with large areas for cover and basking sites. Overwinters in both aquatic and terrestrial habitats.	Not likely; there are no permanent aquatic habitat at the site, therefore there is no suitable habitat for this species within the project site.
Thamnophis gigas Giant garter snake	FT, ST	Forages in permanent or seasonal slow-moving water with emergent vegetation, mud bottoms, and dirt banks. Occurs in irrigation ditches year-round, and rice fields during the growing season. Absent from waters with predatory fish. Requires upland sites or elevated features above floodwaters for winter refugia.	Not likely; the project site is does not provide habitat for this species. There are no waterbodies or waterways nearby that would provide habitat.
Birds			
Asio otus Long-eared owl	CSC	Douglas fir forest, broadleaf evergreen forest, meadow, chaparral, and riparian woodland along creek. Riparian bottomlands with tall willows and cottonwoods or live oak.	Not likely; the project site is does not provide habitat for this species. There are no riparian areas nearby that would provide habitat.

Species	Listing Status[1]	Habitat Association[1]	Likelihood of Occurrence within Project Area
Athene cunicularia Burrowing owl	BCC, CSC	Inhabits open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation; nests underground, usually in abandoned California ground squirrel (*Spermophilus beecheyi*) burrows.	Not likely; the densely wooded project site does not provide habitat for this species.
Geothlypis trichas sinuosa Saltmarsh common yellowthroat	BCC, CSC	Nests in freshwater marsh and forages in saltwater marsh; small territories. Requires thick, continuous cover down to water surface for foraging, tall grasses, tule patches, willows for nesting.	Not likely; there is no freshwater or saltwater marsh or other habitat at or near the site that this species is usually found in; no nesting habitat.
Mammals			
Antrozous pallidus Pallid bat	CSC	Common species of low elevations. Occupies grasslands, shrublands, woodlands, and forests, though most common in open, dry habitat with rocky areas for roosting. Roosts in caves, crevices, mines, occasionally hollow trees and buildings. May night roost in more open spaces such as porches. Very sensitive to roosting site disturbance.	Not likely; there is no habitat at the project site. This species that is sensitive to disturbance is unlikely to be found in the residential area of the project site.
Corynoryhinus townsendii Townsend's big-eared bat	CSC	Found in a wide variety of habitats; most common in mesic sites. Roots in the open, hanging from walls and ceilings. Extremely sensitive to human disturbance.	Not likely; There are no structures on the annexation area that would provide roosting habitat. This species that is sensitive to disturbance is unlikely to be found in buildings in the residential area of the project site.

Species	Listing Status[1]	Habitat Association[1]	Likelihood of Occurrence within Project Area
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	CSC	Forest habitats of moderate canopy and moderate to dense understory; riparian areas along streams and rivers dominated by Calfornia bay laurel, California buckeye, coast live oak, and poison oak. Requires areas with a mix of brush and trees. Constructs nests of shredded grass, leaves, and other material.	Possible; the closest waterway is ___ feet from the site. No nests were observed at the site.
Dipodomys heermanni berkeleyensis Berkeley kangaroo rat	None	Open, grassy hilltops and open spaces in chaparral and blue oak/grey pine woodland.	Not likely; there is no suitable habitat for this species within the project site. The nearest CNDDB record for this species is approximately 10 miles south of the project site.
Taxidea taxus American badger	CSC	Uncommon, permanent resident throughout most of the state except in the North Coast area. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Not likely; though the project site is within the year-long distribution of the American badger, it is an uncommon species throughout most of the state and there is no suitable habitat present within the project site.

[1]**Federal Listing**
FT: Federally listed threatened
FE Federally listed endangered
FPD Federally proposed for delisting
FSC Federal species of concern
PCH Proposed critical habitat
BCC Federally listed birds of conservation concern

State Listing
SE: State listed endangered
FP: State fully protected
ST State listed threatened

CSC California species of special concern

Sources

California Department of Fish and Wildlife (CDFW). 2015. *California Natural Diversity Database (CNDDB), Rarefind 3.1.0*. Data collected February 9, 2015.

CDFW. 2015. *Special Animals*. Last updated January 2015.

United States Fish and Wildlife Service. 2015. Species by County Report. Online: http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=06081. Accessed on February 26, 2015.