Initial Study/Mitigated Negative Declaration

Parkside Trails Residential Project

CUPERTINO

July 2014

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

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SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study (IS) of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of Cupertino. The City of Cupertino is the Lead Agency under CEQA and has prepared this IS to address the impacts of implementing the proposed Parkside Trails Residential project. The project site is 42.4 acres in size and will subdivided into three general areas as discussed in this IS: Residential parcel, Corridor parcel, and Park parcel.

This IS provides both "program level" and "project level" environmental review for the proposed project, in accordance with CEQA Guidelines Sections 15151 and 15168. Program level environmental review is provided for those project components for which General Plan amendments are proposed, but specific development is not proposed at this time. These project components include the Corridor and Park parcel General Plan amendments and rezonings, and the possible onsite and offsite trail and parking lot easements, land dedications, and Deep Cliff Golf Course land trades. Please refer to Section 3.0, Project Description for a detailed description of the proposed project.

This IS provides project level environmental review for the proposed General Plan amendment, Planned Development Rezoning, Development Agreement, Tentative Subdivision Map, Development Permit, Tree Removal Permit, and Architectural Site Approval for the construction of 18 single-family residences on the 8.5-acre Residential parcel. The details of the proposed residential development are known and, in accordance with Section 15161 of the CEQA Guidelines, the environmental review of the proposed residences will focus on the changes in the environment that could result from the proposed residences, including planning, construction and operation.

The specificity of program level and project level review, as they apply to the proposed project, is discussed further in Section 4.0, Environmental Setting, Checklist, and Discussion of Impacts.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state and federal agencies, and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Rebecca Tolentino, Senior Planner
City of Cupertino
Community Development Department
10300 Torre Avenue
Cupertino, CA 95014
RebeccaT@cupertino.org

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City will file a Notice of Determination (NOD) at the County Clerk Recorder's Office, which will posted by the Recorder's Office within 24 hours of receipt and available for public inspection and for 30 days. Filing the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA [CEQA Guidelines Section 15075(g)].

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Parkside Trails Project

2.2 PROJECT LOCATION

The undeveloped 42.4-acre project site is located off of Stevens Canyon Road, immediately south of the existing residences on Ricardo Road in the City of Cupertino. Offsite dedications, easements, and possible land trades on several parcels to the north and east of the 42.4-acre site may also be implemented in association with the project. Regional and vicinity maps of the project site are shown in Figures 2.2-1 and 2.2-2, respectively. The 42.4-acre site is bounded by residences to the north, residences and the old quarry site to the east, Fremont Older Open Space to the south, and Stevens Canyon Road and Stevens Creek County Park to the west. An aerial photograph showing the land uses surrounding the 42.4-acre project site and parcels associated with the offsite dedications, easements, and possible land trades is shown on Figure 2.2-3.

2.3 LEAD AGENCY CONTACT

Rebecca Tolentino, Senior Planner
City of Cupertino
Community Development Department
10300 Torre Avenue
Cupertino, CA 95014
(408) 777-3308

2.4 PROPERTY OWNER/PROJECT PROPONENT

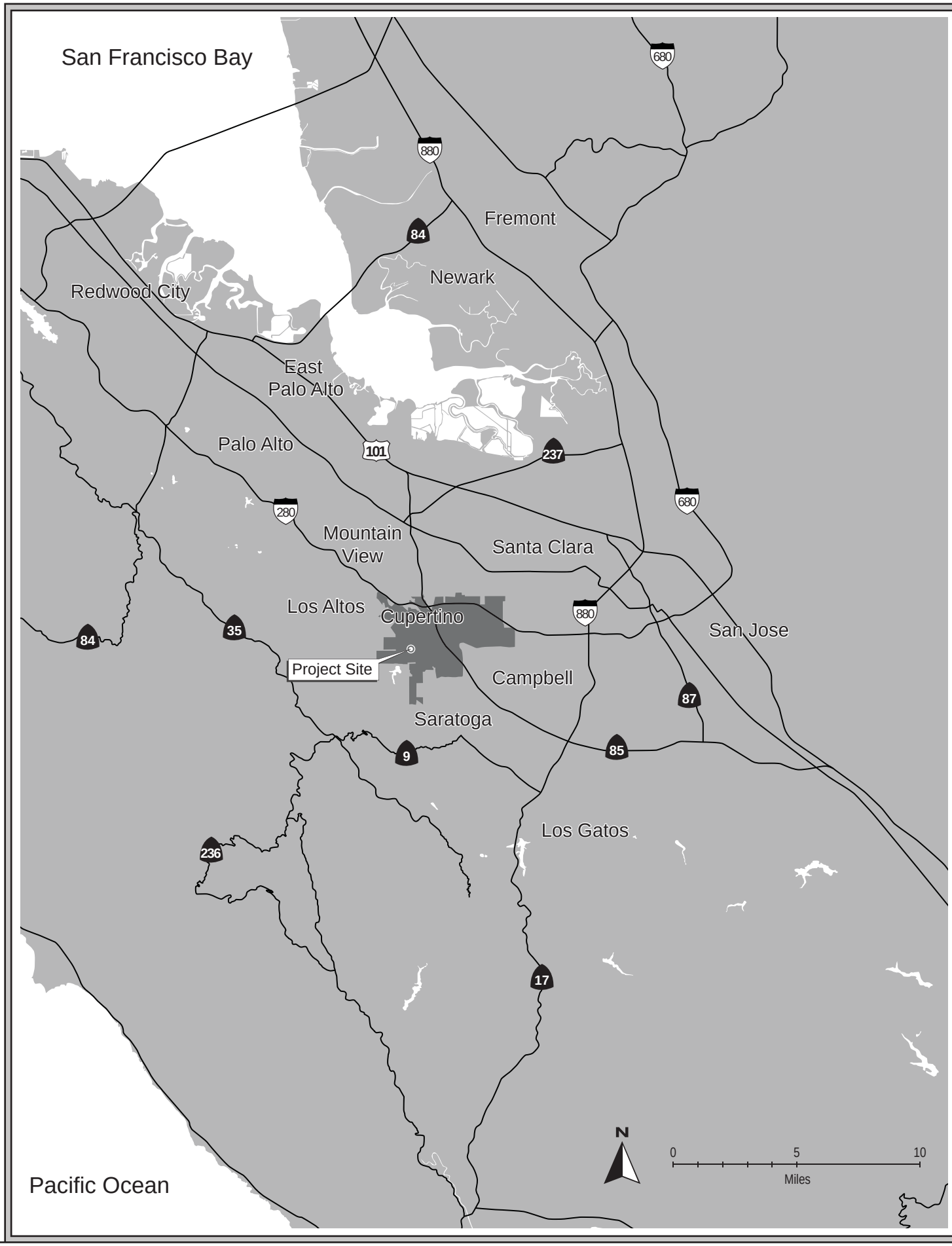
Geoffrey Etnire
Parkside Trails, LLC
50 California Street, 34th Floor
San Francisco, CA 94111
408-799-2992

Bridget Koller
Standard Pacific Homes
3825 Hopyard Avenue, Suite 275
Pleasanton, CA 94588
925-315-0366

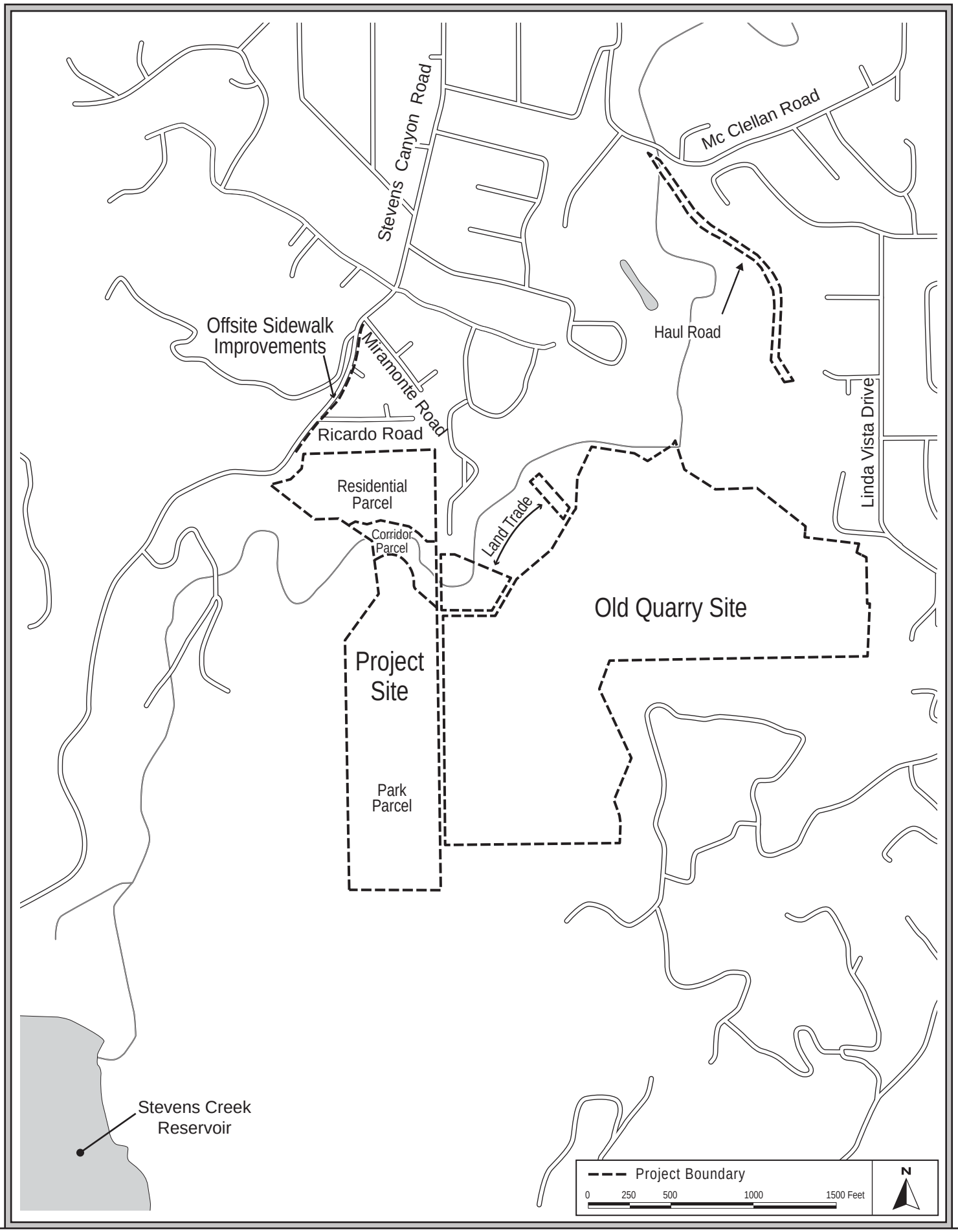
2.5 ASSESSOR'S PARCEL NUMBERS

Project Site (42.4 acres)
351-10-028 and 351-10-043

Offsite Dedications, Easements, and Land Trades
356-05-005 (haul road dedication), portions of 356-05-007 and 356-27-026 (trail and parking lot easements), and portions of 356-05-008 (land trades-portion), and
356-05-009 (land trades-portion)



REGIONAL MAP FIGURE 2.2-1



VICINITY MAP

FIGURE 2.2-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES FIGURE 2.2-3

2.6 EXISTING GENERAL PLAN LAND USE DESIGNATION AND ZONING DISTRICT

Project Site (42.4 acres)
Land Use Designation: *Very Low Density Residential (5-20 Acre Slope Density Formula)*
Zoning District: *RHS (Residential Hillside)*

Offsite Dedications, Easements, and Land Trades
Haul Road (APN 356-05-005)
Land Use Designation: *Parks and Open Space*
Zoning District: *FP-o (Private Recreation-outdoor)*

Trail and Parking Lot Easements (portions of APNs 356-05-007 and 356-27-026)
Land Use Designation: *Very Low Density Residential (5-20 Acre Slope Density Formula)*
Zoning District: *RHS (Residential Hillside)*

Land Trade (portion of APN 356-05-008)
Land Use Designation: *Very Low Density Residential (5-20 Acre Slope Density Formula)*
Zoning District: *RHS (Residential Hillside)*

Land Trade (portion of APN 356-05-009)
Land Use Designation: *Parks and Open Space*
Zoning District: *FP-o (Private Recreation-outdoor)*

SECTION 3.0 PROJECT DESCRIPTION

The 42.4-acre site is located off of Stevens Canyon Road, immediately south of the existing residences on Ricardo Road. The 42.4-acre site is designated *Very Low Density Residential (5-20 Acre Slope Density Formula)* and zoned *RHS (Residential Hillside)*. The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. The proposed subdivision of the 42.4-acre site is shown on Figure 3.0-1. The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict the use of these parcels to open space.[1] The proposed project also includes several offsite components that would be included in the project Development Agreement subject to final approval of the City Council. These offsite components include land dedications, trail and parking lot easements, and land trades, as well as other offsite improvements being considered by the City as part of the Development Agreement including a sidewalk on Stevens Canyon Road that extends from Miramonte Road to the Residential parcel. Each of these project components are described in detail below. Project entitlements related to the project include the following: General Plan Amendments, Rezonings, Development Agreement, Tentative Subdivision Map, Development Permit, Tree Removal Permit, and Architectural Site Approval.

3.1 GENERAL PLAN AMENDMENTS

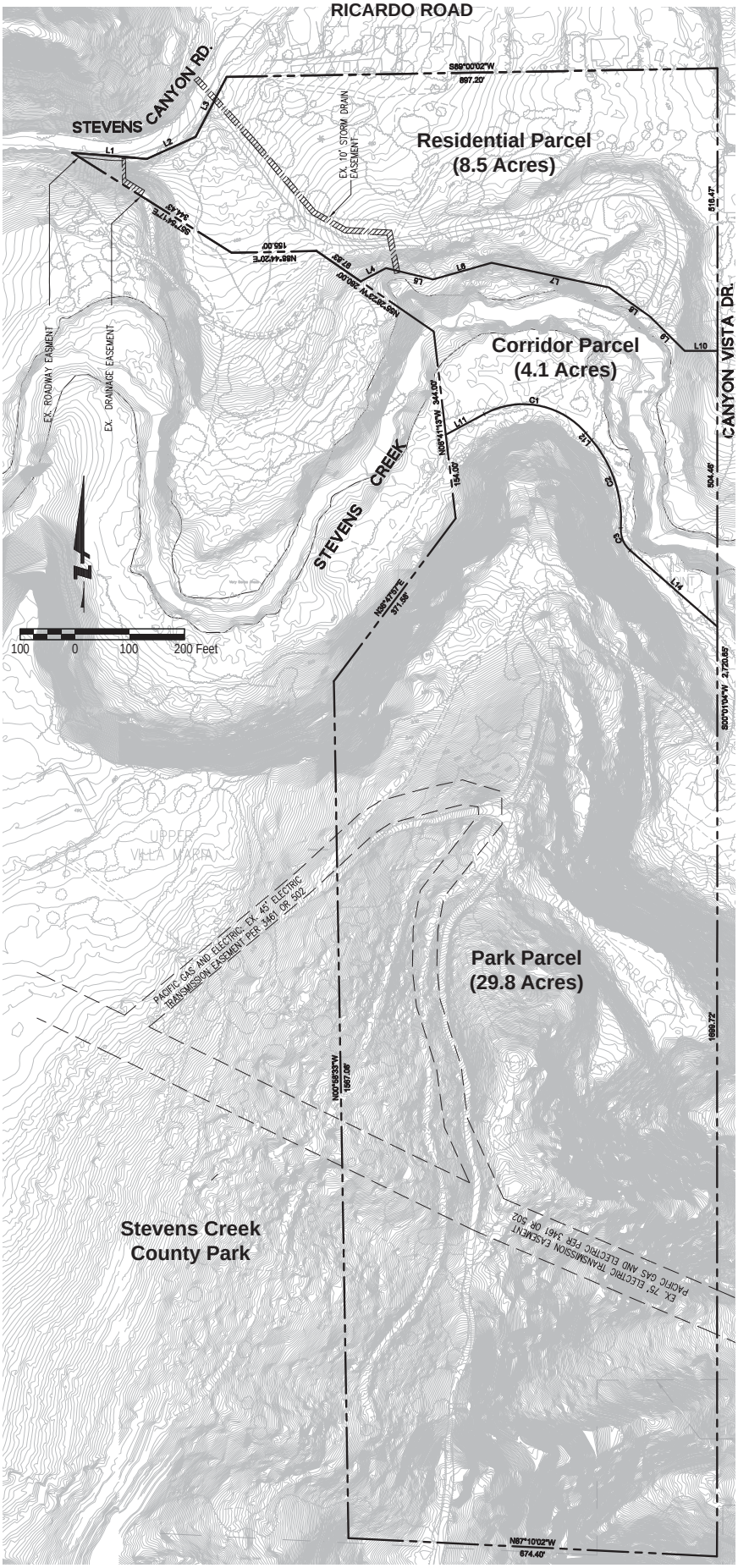
3.1.1 Residential Parcel

As shown on Figure 3.1-1, the proposed General Plan amendment on the Residential parcel would change the land use designation from *Very Low Density Residential (5-20 Acre Slope Density Formula)* to *Low Density Residential (1-5 Dwelling Units per Acre)*.

3.1.2 Corridor Parcel

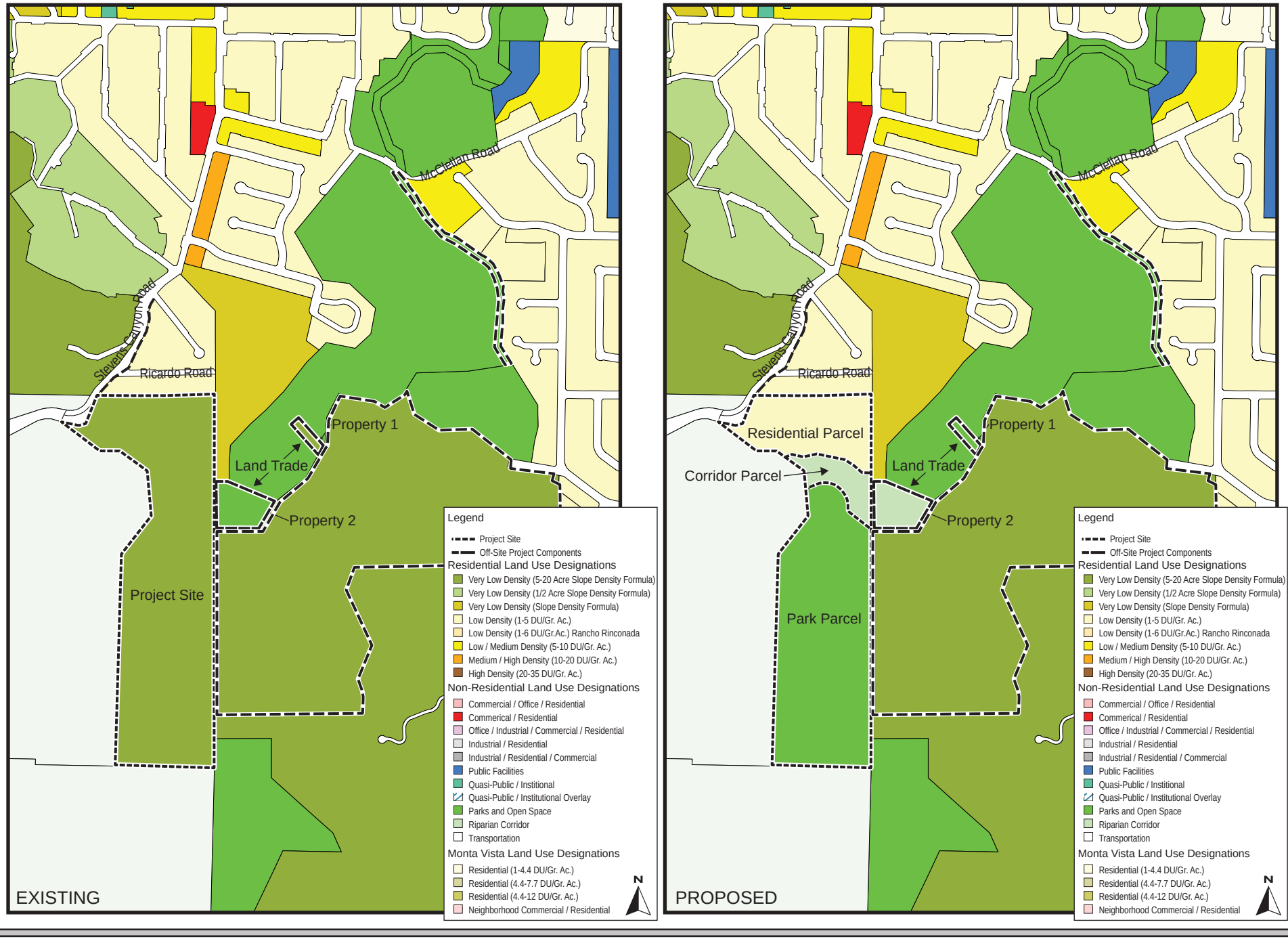
As shown on Figure 3.1-1, the General Plan amendment on the Corridor parcel would change the land use designation from *Very Low Density Residential (5-20 Acre Slope Density Formula)* to *Riparian Corridor*.

[1] Options to the proposed project, as it relates to the Park parcel, are under consideration. These options include keeping the General Plan and zoning designations on the Park parcel *Very Low Density Residential (5-20 Acre Slope Density Formula)* and *RHS (Residential Hillside)*, respectively, but recording a conservation easement over the parcel to preclude future development. In addition, if the Park parcel were to remain *Very Low Density Residential (5-20 Acre Slope Density Formula)* and *RHS (Residential Hillside)* with a conservation easement, the City may consider a lot line adjustment that would merge the Park parcel with the old quarry site. The intent of both the proposed project and the options to the proposed project is to restrict the use of the land within the Park parcel to open space uses. Therefore, the impacts of the proposed project compared to those that could occur under the possible options would be identical, as they would not affect the physical environment on and adjacent to the parcels differently. For these reasons, the analysis in this Initial Study covers the zoning, conservation easement, and lot line adjustment options described above.



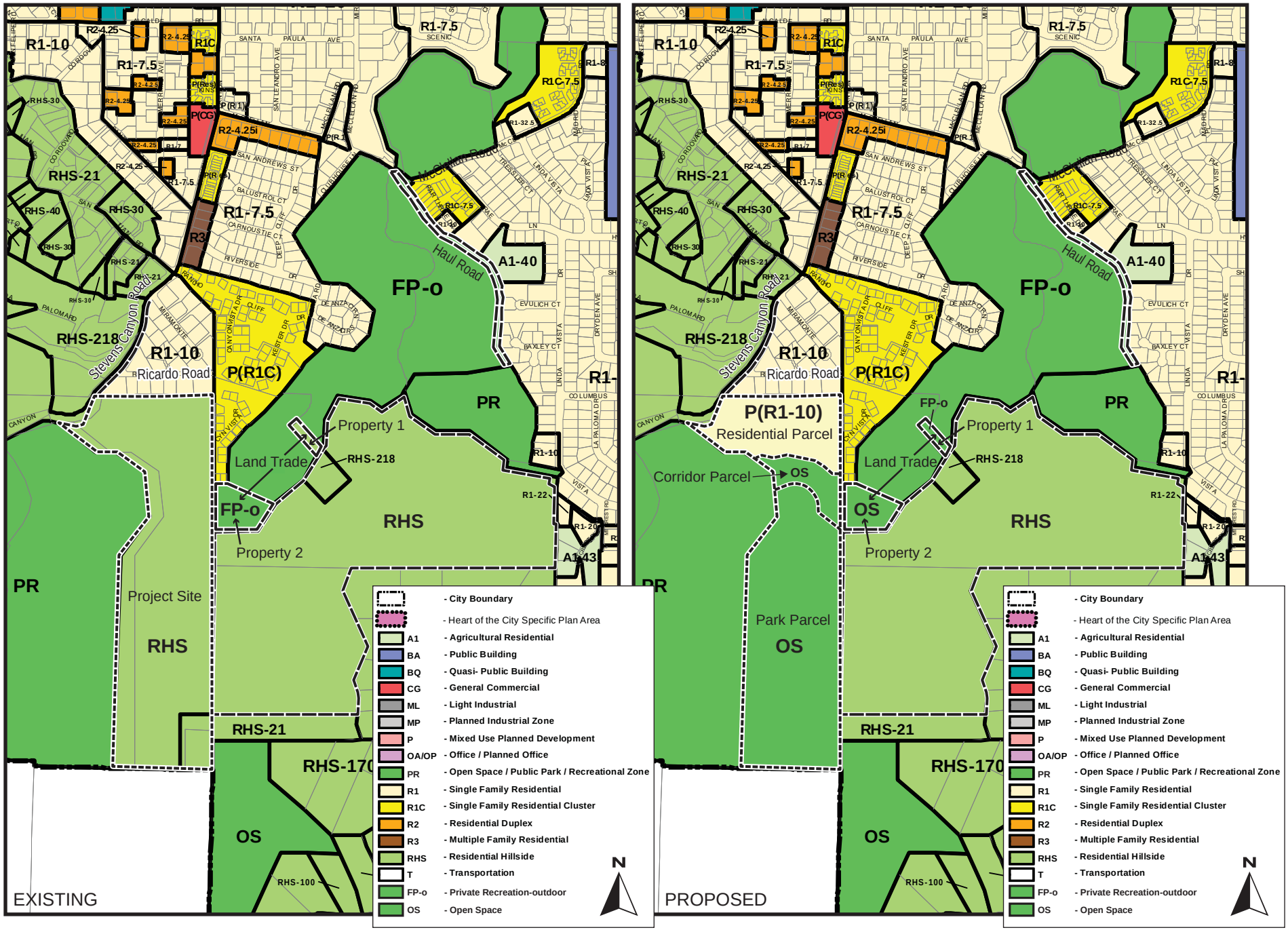
Source: BKF Engineers, 3-31-14.

PROPOSED SUBDIVISION FIGURE 3.0-1



EXISTING AND PROPOSED LAND USE DESIGNATIONS

FIGURE 3.1-1



EXISTING AND PROPOSED ZONING DESIGNATIONS

FIGURE 3.2-1

3.1.3 Park Parcel

As shown on Figure 3.1-1, the General Plan amendment on the Park parcel would change the land use designation from *Very Low Density Residential (5-20 Slope Density Formula)* to *Parks and Open Space*.

3.2 PLANNED DEVELOPMENT REZONING – RESIDENTIAL PARCEL

As shown on Figure 3.2-1, the existing zoning on the Residential parcel is *RHS (Residential Hillside)*. The project proposes to rezone the Residential parcel *P (R1-10) (Planned Development - Single-family Residential with semi-rural characteristics 10,000 square foot minimum lot area)* to allow for the development of 18 single-family residences and associated improvements. The conceptual site plan for the proposed residences is shown on Figure 3.2-2.

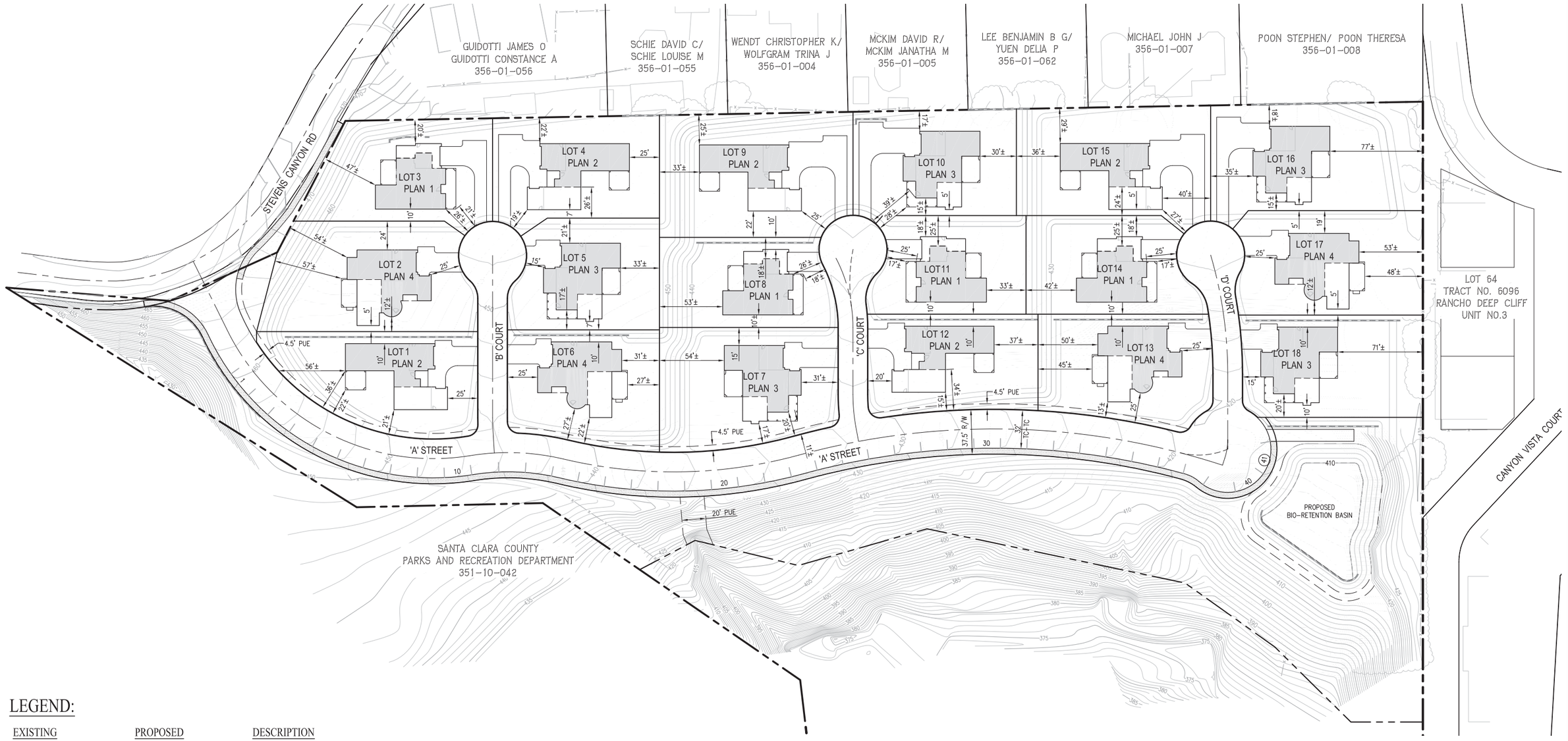
3.2.1 Residences

The proposed Planned Development Rezoning would allow for subdivision of 18 lots and common areas to be maintained by a homeowners association. The two-story residences, ranging in size from 4,000 to 5,300 square feet with three to five bedrooms, would not exceed 28 feet in height. All residences would include three car garages with driveway aprons to accommodate guests. The minimum setbacks allowed under the proposed base zoning (i.e., R1-10) would be maintained or exceeded. A Planned Development rezoning is proposed in order to include additional performance standards and regulations for the Residential parcel, which is located at the City's rural edge. The Residential Hillside zoning district performance standards and regulations incorporated into the proposed Planned Development rezoning include, but are not limited to, the following design standards:

- Building and Roof Forms
- Colors
- Outdoor Lighting

3.2.2 Site Access

A private road off Stevens Canyon Road would provide access to the proposed residences. The private road would be a cul-de-sac with additional guest parking along one side. The Stevens Canyon Road frontage will be modified with storm drainage improvements, landscaping, a wider shoulder to accommodate cyclists, and curb, gutter, and sidewalk. Access to the residences is designed to maximize line of sight and safety for ingress and egress to and from Stevens Canyon Road.



LEGEND:

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		LOT LINE
		RIGHT-OF-WAY LINE
		CENTER LINE
		TOP OF CURB
		BUILDING – 2nd FLOOR FOOTPRINT

N

0 40 80 160
Feet

Source: Carlson, Barbee, and Gibson, Inc. Nov. 15, 2013.

CONCEPTUAL SITE PLAN

FIGURE 3.2-2

3.2.3 Grading and Site Clearing

The Residential parcel slopes downward from Stevens Canyon Road in a southeasterly direction towards Stevens Creek. Substantial grading is required to construct the proposed residences. The conceptual grading and drainage plan is shown on Figure 3.2-3. Grading is required across most of the Residential parcel to construct the entrance road, private cul-de-sacs, level building pads, driveways, and a stormwater bioretention area, which will balance with approximately 30,000 cubic yards of cut and fill. Grading on the Residential parcel is also required to overexcavate and reuse areas of undocumented fill and to stabilize slopes along Stevens Creek, which will also balance with approximately 100,000 cubic yards of cut and fill. Soil would not be imported or exported to or from the Residential parcel. No grading would occur within 30 feet of the Stevens Creek riparian corridor, except for the temporary disturbance of 0.02 acre of riparian habitat during construction of the bioretention basin.[2] There are approximately 319 existing trees on and around the Residential parcel. The proposed grading would clear all of the existing trees from the Residential parcel, except for the trees along the north and east boundaries. Retaining walls ranging from 1.5 to 10 feet in height are required at various locations across the entire Residential parcel. The entry roadway will require the tallest retaining wall, which would be up to 10 feet in height. All other aboveground retaining walls would be five feet or less in height. It should be noted that an approximate 60-foot, below-grade retaining wall is proposed along an approximately 600-foot section of the entry roadway. The wall will be constructed completely below grade, except for a few short sections that will be at grade. Therefore, the visibility of the wall will be minimal.

3.2.4 Hydrology and Water Quality

3.2.4.1 *Stormwater Drainage*

An existing outfall to Stevens Creek is located on the Corridor parcel. Stormwater runoff from Stevens Canyon Road and approximately 28 acres west of the project site across Stevens Canyon Road is currently conveyed through the site in an 18-inch storm drain line to the existing outfall. Under the proposed project, the existing storm drain line would be relocated to the entrance road and would continue to connect directly to the existing outfall (refer to Figure 3.2-3). No new outfalls are proposed by the project. Except for a four-foot section of the existing outfall pipe that may need to be replaced, the existing outfall will not be modified.

3.2.4.2 *Stormwater Quality, Hydromodification, and Flooding*

The front yard landscaping for each home and bioretention planters throughout the site would be designed to filter and reduce the volume and rate of stormwater runoff from building roofs, patios and driveways.

A bioretention basin is proposed in the southeast portion of the Residential parcel to collect and filter the stormwater runoff generated by the project site's impervious streets and driveways. The proposed basin would also address the hydromodification control for runoff from the site, including

[2] The Stevens Creek riparian corridor is defined as the top of bank of the creek or the edge of the existing riparian vegetation, whichever is greater.

GUIDOTTI JAMES O
GUIDOTTI CONSTANCE A
356-01-056

SCHIE DAVID C/
SCHIE LOUISE M
356-01-055

WENDT CHRISTOPHER K/
WOLFGRAM TRINA J
356-01-004

MCKIM DAVID R/
MCKIM JANATHA M
356-01-005

LEE BENJAMIN B G/
YUEN DELIA P
356-01-062

MICHAEL JOHN J
356-01-007

POON STEPHEN/ POON THERESA
356-01-008

STEVENS CANYON RD

PROPOSED DRIVEWAY OPENING

AREA DRAIN (TYP)

EX TC 470.5±
EX TC 469.2±
EX TC 468.2±
EX TC 467.0±
EX TC 466.8±

1.5' RET WALL
2.5' RET WALL
3.5' RET WALL
4.0' RET WALL
4.5' RET WALL
5' RET WALL
STEP WALL

1 P 449.0
2 P 454.0
3 P 458.0
4 P 458.0
5 P 453.0
6 P 448.0
7 P 436.0
8 P 440.0
9 P 444.0
10 P 444.0
11 P 440.0
12 P 435.0
13 P 425.0
14 P 430.0
15 P 433.0
16 P 433.0
17 P 430.0
18 P 425.0

EXISTING STORM DRAIN TO BE REMOVED

'B' COURT
'C' COURT
'D' COURT

'A' STREET

2'-9' RETAINING WALL

LOT 64
TRACT NO. 6096
RANCHO DEEP CLIFF
UNIT NO.3

CANYON VISTA COURT

LIMITS OF CIVIL GRADING
LIMIT OF REMEDIAL GRADING
LIMIT OF RIPARIAN CORRIDOR

PROPOSED BIO-RETENTION AREA

SANTA CLARA COUNTY
PARKS AND RECREATION DEPARTMENT
351-10-042

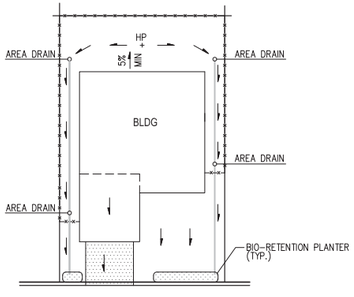
EXISTING OUTFALL TO REMAIN

STEVENS CREEK

EMERGENCY SPILLWAY WITH SLOPE PROTECTION (VEGETATED RIP RAP OR SIMILAR) PER GEOTECHNICAL RECOMMENDATIONS)

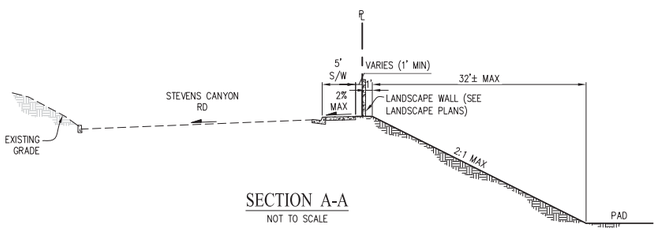
LEGEND:

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		LOT LINE
		RIGHT-OF-WAY LINE
		CENTER LINE
		EASEMENT LINE
		TOP OF CURB
x 67.0	x 67.0	SPOT ELEVATIONS
		EXISTING TREE
EX SD	SD	STORM DRAIN LINE (PRIVATE)
	SD-OFF	STORM DRAIN LINE FOR OFF-SITE DRAINAGE (PUBLIC)
	SDFM	STORM DRAIN FORCE MAIN (PRIVATE)
		AREA DRAIN LINE
○	●	STORM DRAIN MANHOLE
⊠	■	FIELD INLET
□	■	CATCH BASIN
	⟹	OVERLAND RELEASE

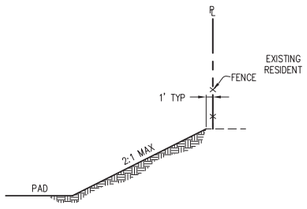


NOTE:
ADDITIONAL AREA DRAINS MAY BE REQUIRED AT TIME OF FINAL GRADING AS NECESSARY.

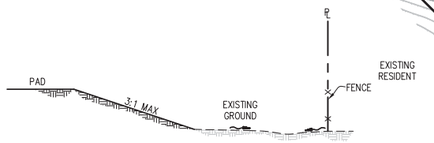
TYPICAL LOT DRAINAGE
NOT TO SCALE



SECTION A-A
NOT TO SCALE

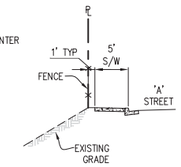


SECTION B-B
NOT TO SCALE

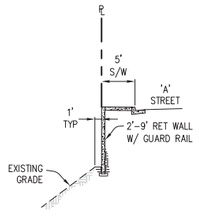


SECTION C-C
NOT TO SCALE

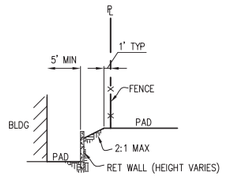
SECTION D-D
NOT TO SCALE



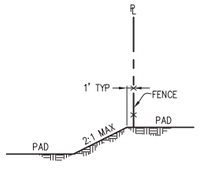
SECTION E-E
NOT TO SCALE



SECTION F-F
NOT TO SCALE



SECTION G-G
(TYPICAL RETAINING WALL CONDITION)
NOT TO SCALE



SECTION H-H
(TYPICAL SIDEYARD CONDITION)
NOT TO SCALE

N

0 40 80 160
Feet

Source: Carlson, Barbee, and Gibson, Inc. Apr. 11, 2014.

CONCEPTUAL GRADING AND DRAINAGE PLAN

FIGURE 3.2-3

runoff that currently flows onto the Residential parcel from the existing residences on the south side of Ricardo Road, to pre-project levels and address increase in peak discharge from the 10- and 100-year storm events. The filtered runoff would then be pumped from the bioretention area to the existing Stevens Creek outfall. Pump rates from the bioretention basin would be controlled to maintain existing flow rates at the outfall. No new outfall structures are proposed by the project.

As described in Section 4.9, Hydrology, the Residential parcel is not within the Stevens Creek Reservoir dam failure in inundation zone and the 100-year flood zone. Portions of the Corridor and Park parcels are within both dam failure in inundation and 100-year flood zones.

3.2.5 Landscaping

The front yards and common open space areas will be landscaped in accordance with the requirements of the Planned Development rezoning. The conceptual landscape plan is shown on Figure 3.2-4. As described above in Section 3.2.3, Grading and Site Clearing, approximately 264 existing trees on and around the Residential parcel would be removed and about 55 trees located along the north, east and south boundaries would be retained. A total of 329 trees would be planted on the site to replace the 264 existing trees that would be removed by the project.

3.2.6 Utilities, Easements, Improvements and Right-of-way Dedication

3.2.6.1 *Utilities*

The project would connect to the existing water line in Stevens Canyon Road, the existing sanitary sewer line in Canyon Vista Court, and the existing stormwater outfall to Stevens Creek on the Corridor parcel. Connection to the existing sanitary sewer line in Canyon Vista Court would require installing a lift station on the Residential parcel and conveying flows through a new sanitary sewer line in an easement on the adjacent property. A sanitary easement may need to be obtained from the Rancho Deep Cliff Homeowners' Association, if determined necessary by the Cupertino Sanitary District. Consistent with the requirements of the Cupertino Sanitary Sewer District, the proposed project includes an onsite backup generator to power the lift station in the event of a power failure. The trailer-mounted diesel backup generator (Brand: Magnum; Model: MMG 25 A; KW: 23 KVA; Amp 240) would be tested weekly adjacent to the sanitary sewer lift station.

3.2.6.2 *Easements*

There are two existing storm drain easements on the Residential parcel. One easement is for the existing 18-inch storm drain line and outfall on the project site. Except for the outfall portion of the easement, this easement would be abandoned and the existing storm drain line would be relocated to the proposed entrance road (refer to Section 3.2.4.1 Stormwater Drainage, Drainage). The other storm drain easement is located in the westernmost corner of the Residential parcel and would remain under the proposed project.

N

0 15 30 60
Feet

Source: Gates + Associates, April 2014.

CONCEPTUAL LANDSCAPE PLAN

FIGURE 3.2-4

3.2.6.3 *Improvements and Right-of-way Dedication*

Frontage Improvements

The Stevens Canyon Road project frontage will receive improvements, including storm drainage, landscaping, a wider shoulder to accommodate cyclists, and curb, gutter, and sidewalk. These frontage improvements would be dedicated to the City.

Offsite Sidewalk Improvements

As part of the project Development Agreement, the project may be required to construct a sidewalk from Miramonte Road to the project site, subject to approval of the City Council. If required to install the sidewalk, the proposed project would design and construct an approximately 850-linear-foot sidewalk along the east side of Stevens Canyon Road from the Residential parcel (APN 351-10-043) to Miramonte Road (refer to Figure 2.2-3). The sidewalk would be five feet wide. Construction of the sidewalk may include, but would not be limited to, installation of ADA ramps, retaining walls and fences, grading (mostly fill), asphalt pavement modifications, curb modifications, tree and vegetation removal, utility relocation and modification, street and driveway conforms, site modifications to five abutting properties, and miscellaneous work related to the sidewalk installation. Right-of-way or sidewalk easements will be required from two of the properties that front Stevens Canyon Road along the length of the proposed sidewalk improvements and several oak trees may be removed. The project applicant would be responsible for acquisition of the right-of-way or easements; however, the City may facilitate and cooperate in this communication.

Pedestrian Trail Connection

An unofficial volunteer trail connecting Stevens Canyon Road to Stevens Creek County Park currently crosses the northwest corner of the Residential parcel. The project proposes to provide a pedestrian access easement and improvements (e.g., stairs and/or path) to maintain pedestrian access through the Residential parcel.

3.2.7 Construction Schedule and Staging

Project construction is anticipated to begin spring 2015 with remedial grading (e.g., slope stabilization and retaining walls), which would take approximately six months to complete. This would be followed with civil grading (e.g., level building pads, retaining walls, and roads), and then wet utility installation (e.g., water, sewer, and stormwater), concrete work (e.g., foundations and sidewalks), dry utility installation (e.g., electricity, gas, telephone, and cable), and paving, which would take a total of approximately four months to complete. Vertical construction (e.g., residences and fences) would be market driven, and is anticipated to be completed one cul-de-sac (i.e., six residences) at a time. All construction staging would occur onsite.

As discussed in Section 4.17, Utilities and Service Systems, the project sanitary sewer system would connect to the existing sanitary sewer main located adjacent to the Residential parcel in Canyon Vista Court. Connecting to the existing sanitary sewer line in Canyon Vista Court would require conveying flows in a new sanitary sewer line through an existing easement on the adjacent property,

or may require obtaining a sanitary easement from the Rancho Deep Cliff Homeowners' Association. Work within the easement (whether an existing easement or newly obtained sanitary easement) would require the use of a backhoe and other typical construction equipment (e.g., cement saw, vibratory compacter) to dig and fill the trench and patch any damaged paving. This work is estimated to take approximately one week to complete and would be completed during the installation of wet utilities on the Residential parcel.

3.3 REZONING - CORRIDOR PARCEL

As shown on Figure 3.2-1, the project proposes to rezone the Corridor parcel from *RHS (Residential Hillside)* to *OS (Open Space)*, which would be consistent with the proposed *Riparian Corridor* General Plan land use designation (refer to Section 3.1, General Plan Amendments). The purpose of the Corridor parcel General Plan amendment and rezoning is to protect the riparian corridor on the parcel and the project area from future development. The Corridor parcel will be irrevocably offered for dedication in fee title to the City or its designee. In addition to the dedication, an access easement for the Corridor parcel will be irrevocably offered to the City for the purposes of creek maintenance, trail construction and habitat restoration. The easement will run through the Residential parcel to the Corridor parcel. If, in the future, the City or its designee decides to accept the offer of dedication, the zoning of the parcel would be amended to *PR (Parks and Recreation)*, as the *OS* zone is intended for privately owned open space while the *PR* zone is intended for publicly-owned open space.[3]

3.4 REZONING - PARK PARCEL

As shown on Figure 3.2-1, the project proposes to rezone the Park parcel from *RHS (Residential Hillside)* to *OS (Open Space)*, which would be consistent with the proposed *Parks and Open Space* General Plan land use designation (refer to Section 3.1, General Plan Amendments). The purpose of the Park parcel General Plan amendment and rezoning is to protect the open space on the parcel and in the project area from future development. The project applicant has irrevocably offered to dedicate the approximate 30-acre Park parcel to the City or its designee. If, in the future, the City or its designee decides to accept the offer of dedication, the zoning of the Park parcel would be amended to *PR (Parks and Recreation)*, as the *OS* zone is intended for privately owned open space while the *PR* zone is intended for publicly-owned open space.[4]

3.5 OFFSITE DEDICATIONS, EASEMENTS, AND LAND TRADES

The proposed project includes several offsite components, including land dedications, trail and parking lot easements, and land trades that are being considered as part of the project Development Agreement. To assist in providing the City with information about what trail construction could potentially entail and cost, the Parkside Trails Feasibility Study was prepared by Jana Sokale Environmental Planning, et al., in June 2014. This study describes possible trail designs in the areas where irrevocable offers of land and easement dedications are proposed. The Parkside Trails

[3] With respect to this CEQA analysis, there is no difference between the OS zone versus the PR zone. This is because the environmental effects of the options are the same (i.e., to preserve the property for open space uses).
[4] Ibid.

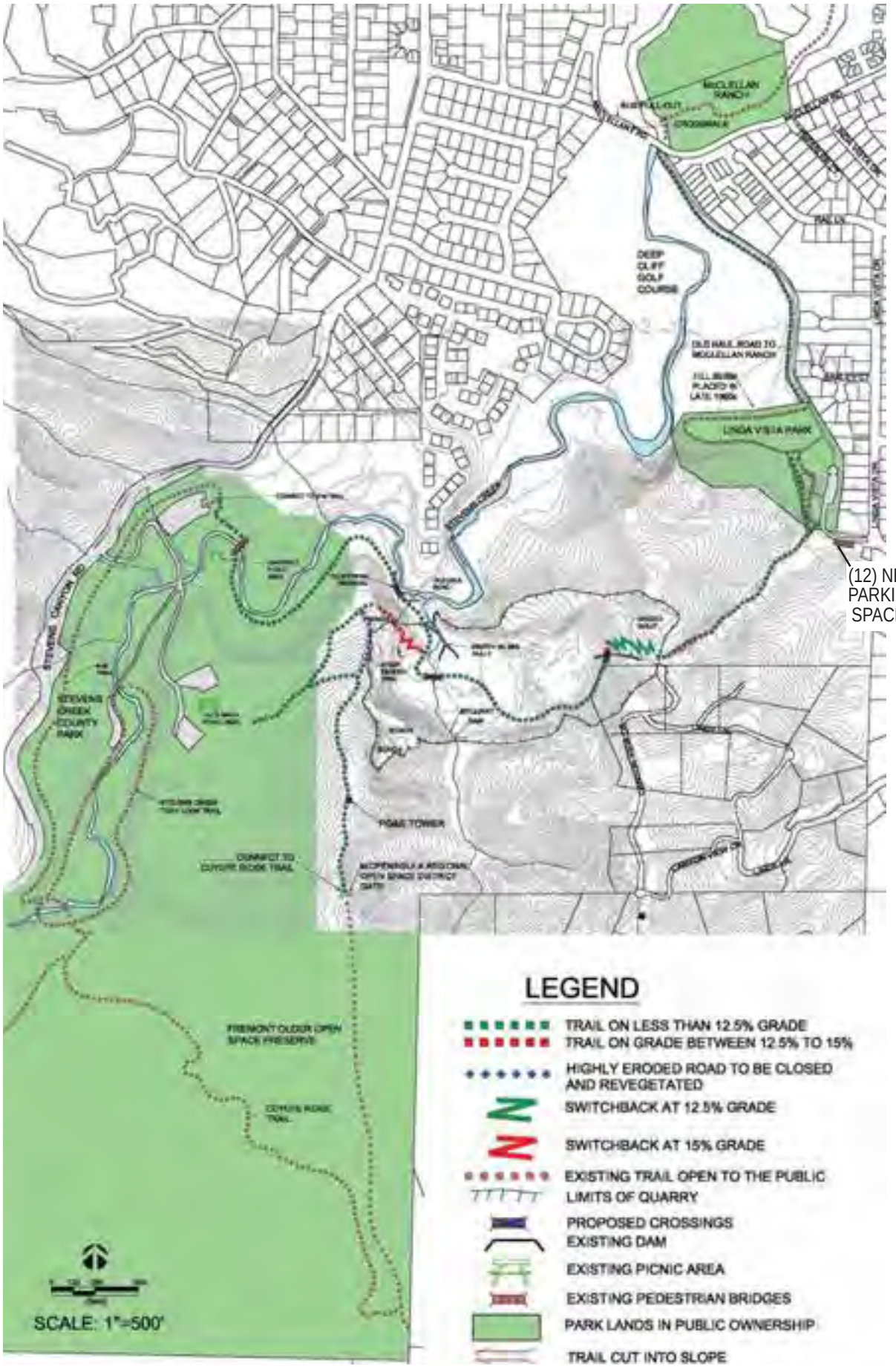
Feasibility Study is included as Appendix A to this Initial Study. The conceptual trail map included in the trails feasibility study is shown on Figure 3.5-1. However, the exact trail and parking lot easements, alignments and design for the possible trail(s) and parking lot are uncertain at this point. Therefore, this environmental document includes a program-level analysis of the impacts related to building the improvements in the locations identified in the conceptual trail map. This level of review would allow the City to accept the dedications, easements and land trades should it choose to do so; however, appropriate project-level environmental review would be required prior to actual construction of any future trails and/or parking lot.

3.5.1 Historic Haul Road Dedication

As shown on Figure 2.2-3, a historic haul road connects McClellan Ranch Preserve and Linda Vista Park. The project proposes an irrevocable offer to dedicate this 1.56-acre parcel in fee title to the City. This parcel could be used by the City to construct an approximately 0.7 mile, public, eight- to 10-foot wide multi-use trail connecting the two parks (refer to Figure 3.5-1). However, as noted above, project-level environmental review would be required prior to actual construction of any future trails. The Haul Road parcel is currently zoned *FP-o (Private Recreation-outdoor).* If, in the future, the City decides to accept the offer of dedication, the zoning of the Haul Road parcel would be amended to *PR (Parks and Recreation)*, as the *PR* zone is intended for publicly-owned open space.[4]

3.5.2 Old Quarry Site Regional Trail and Linda Vista Parking Lot Easements

The old quarry site is shown on Figure 2.2-3. The project proposes irrevocable offers of dedication to the City for the regional trail and Linda Vista Parking Lot easements on the old quarry site. The proposed trail and parking lot easements could further the City's trail planning efforts to connect the City's parks with Stevens Creek County Park to the west and Fremont Older Open Space Preserve to the southwest. The specific locations of easements for potential trails within the old quarry site have not been determined at this time; however, the Parkside Trails Feasibility Study describes possible trail alignments and designs. The Linda Vista Parking Lot easement is proposed to accommodate up to 12 parking spaces near the Linda Vista Drive entrance (refer to Figure 3.5-1), and could be implemented if and when the haul road connection is made between McClellan Ranch Preserve and Linda Vista Park. The possible trails could include: (1) a four- to six-foot wide, 1.25 mile, natural surface trail through the quarry to the existing Chestnut Picnic Area; (2) a four- to six-foot wide, 0.25 mile, natural surface connection to the existing Villa Maria Picnic Area; and (3) an eight- to 10-foot wide, multi-use trail extension of the existing Coyote Ridge Trail to Villa Maria Picnic Area. As noted previously, the Parkside Trails Feasibility Study was prepared in order to assist the City in understanding what trail construction could potentially entail and cost; the study should not infer actual construction of the trails described in the report. The conceptual trail map included in the trails feasibility study is shown on Figure 3.5-1.



CONCEPTUAL TRAIL CONNECTION MAP FIGURE 3.5-1

3.5.3 Land Trades

The two properties subject to the proposed land trades are labeled Property 1 and Property 2 on Figure 3.1-1. Property 1 comprises a slender portion of an existing fairway on Deep Cliff Golf Course currently owned by the project applicant; Property 2 comprises a segment of Stevens Creek and associated riparian corridor owned by the golf course property owners, but not utilized for the golf course. If a land trade can be arranged between the project applicant and Deep Cliff Golf Course, the proposed project includes the actions listed below in relation to the two properties. As an alternative, the land trade may also include an irrevocable offer of dedication of Property 1 to the City for a future land trade of Property 2 with Deep Cliff Golf Course.

Property 1 (portion of APN 356-05-008)

- General Plan amendment from *Very Low Density Residential (5-20 Acre Slope Density Formula)* to *Parks and Open Space*.
- Rezoning from *RHS (Residential Hillside)* to *FP-o (Private Recreation-outdoor).*
- Lot line adjustment to reconfigure parcels.
- Transfer fee title from applicant to golf course owners where developed golf course exists.

Property 2 (portion of APN 356-05-009)

- General Plan Amendment from *Parks and Open Space* to *Riparian Corridor.*
- Rezoning from *FP-o (Private Recreation-outdoor)* to *OS (Open Space).*
- Lot line adjustment to reconfigure parcels.
- Transfer fee title from golf course owners to applicant and applicant makes irrevocable offer of dedication of Property 2 to the City or appropriate agency to protect riparian habitat. If, in the future, the City or its designee decides to accept the offer of dedication, the zoning of Property 2 would be amended to *PR (Parks and Recreation)*, as the *OS* zone is intended for privately owned open space while the *PR* zone is intended for publicly-owned open space.[5]

3.6 OTHER PROJECT ENTITLEMENTS

3.6.1 Development Agreement

The onsite and offsite dedications, trail and parking lot easements, and land trades described above will be formalized in a project Development Agreement. In addition to the irrevocable offers made by the project applicant, the Development Agreement will include other requirements tied to the development proposal, as well as amendments made by the City. The final terms of the Development Agreement will be subject to approval of the City Council. However, this Initial Study provides the environmental clearance allowing the City to approve any or all of the terms of the Development Agreement as described in the Initial Study and listed below:

- **Offsite BMR mitigation.** Applicant proposes to fulfill below market rate (BMR) mitigation requirement by purchasing and transferring property at a reduced cost to an affordable housing developer for the construction of offsite BMR units. A specific site has not been

[5] Ibid.

selected. As part of the Development Agreement, the City may require additional commitments, such as monetary or physical improvements from the applicant to ensure appropriate BMR mitigation is provided.[6]

- **Dedications of land in fee title.** Applicant is offering to dedicate the Corridor and Park parcels and haul road parcel to the City in fee title. The offers of dedication would be irrevocable and would not obligate the City to accept the dedications unless they chose to do so. As part of the Development Agreement, the City may request from the applicant a two-layered offer of dedication for the Park parcel: one layer for the entire parcel in fee title and a second layer in easement for only the future trail alignments. The two-layered offer of dedication would provide the City an option for accepting only the trail easements without having to accept the entire Park parcel in fee title.

- **Dedications of land in easement.** Applicant is offering dedication of easements for future trails and a parking lot on the old quarry parcel site.[7] The parking lot would accommodate up to 12 parking spaces and would be located near the Linda Vista Drive entrance to Linda Vista Park. The exact location of trail easements and the parking lot have not yet been identified, but could generally be as described in the Parkside Trails Feasibility Study (included as Appendix A to this Initial Study). The purpose of the trails feasibility study is to provide the City with information about what trail construction could entail and cost; it should not infer actual construction of the trails described in the report. The offers of dedication for the trails and parking lot easements would be irrevocable, allowing the City to decide if and/or when they chose to accept the dedication(s). As part of the Development Agreement, the City may also require irrevocable offers of dedication for the following additional easements:
    - Access easement from the Residential parcel to the Corridor parcel, or alternative location approved by the City, for the purposes of creek maintenance, construction and habitat restoration.

- **Quarry site improvements.** The project applicant may be required to provide a specified monetary contribution to the City that would be used towards technical studies and/or improvements needed for the development of future trails.

- **Land Trades.** As described in Section 3.5.3, Land Trades, a land trade of two properties between the project applicant and Deep Cliff Golf Course is proposed. If arranged, the property that is transferred from the golf course to the project applicant (Property 2) may be dedicated to the City or other appropriate agency to protect the riparian habitat similar to the Corridor parcel. As an alternative, the land trade may also include an irrevocable offer of

[6] As the site for the BMR units is unknown, it would be speculative to analyze environmental impacts of future BMR housing at this time. Appropriate environmental review under CEQA will be completed for future BMR housing development once the proposed location and scope is known.

[7] As an alternative to the proposed dedication of an easement for the construction of a parking lot on the old quarry parcel, an option under consideration is a lot line adjustment to allow for the parking lot construction. The intent of both the proposed easement and the optional lot line adjustment is to allow for the construction a 12-space parking lot. Therefore, the physical impacts to the environment would be the same under either option. For these reasons, the analysis in this Initial Study covers both the proposed easement and the option of a lot line adjustment to construct the parking lot, as described above.

dedication of Property 1 to the City for a future land trade of Property 2 with Deep Cliff Golf Course.

- **Other offsite improvements.** The project may be required to design and construct an approximately 850-linear-foot sidewalk along the east side of Stevens Canyon Road from the project site to Miramonte Road as described in this Initial Study.

3.6.2 Tentative Subdivision Map

The project proposes adoption of a tentative subdivision map for the division of an existing 42.4-acre site into three parcels: the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels. The Residential parcel will be further subdivided into 18 residential lots and two common area lots for private roads and open space. Lot sizes of the proposed residential lots range from approximately 10,000 to 15,300 square feet, with an average lot size of approximately 12,500 square feet. The division of land within the City is regulated under both the State of California Subdivision Map Act and the City's Subdivision Ordinance (Chapter 18 of the Municipal Code). Under the City's regulations, the conformity of a proposed subdivision to the General Plan, any applicable Specific Plan, and the zoning ordinance is assessed and considered by City staff and the City Council prior to approval or denial of a tentative subdivision map. The design, improvement and land survey data, as well as the type of streets, roads, utilities, public services and topographical conditions, such as slope, are considered as a part of review of a proposed tentative subdivision map.

3.6.3 Development Permit

The proposed development on the Residential parcel will require issuance of a Development Permit by the City Council for the construction of new residential structures and property development. The Development Permit would allow for the construction of 18 single-family residences and associated roadways, a stormwater retention pond, and ancillary sanitary sewer lift station.

3.6.4 Tree Removal Permit

A tree removal permit is proposed to allow the removal and replacement of 264 trees on and around the Residential parcel. The trees proposed for removal are within excavation and residential development areas primarily within the Residential parcel. The tree removal permit will be considered as a part of the Planned Development zoning of the Residential parcel by the City Council. A detailed discussion of the trees proposed to be removed is provided in Section 4.4, Biological Resources of this Initial Study.

3.6.5 Architectural Site Approval

The project requires Architectural and Site Approval to allow the proposed, 18 unit single-family housing development and associated improvements including a private roadway system, structured retaining walls, stormwater drainage system, sanitary sewer lift station, and landscaping.

3.7 SUMMARY OF ENTITLEMENT OPTIONS

The City Council may consider options to the proposed General Plan amendments, rezonings and terms of the Development Agreement due to several factors, including whether land will be in public or private ownership. The options shown in Table 3.7-1 would result in the same basic land uses and have the same or similar environmental impacts as the proposed project. For the purposes of this Initial Study, adoption of the options shown in Table 3.7-1 are, therefore, covered by the following analysis.

Table 3.7-1: Summary of Entitlement Options

	Residential Parcel	Corridor Parcel	Park Parcel	Dedications and Land Trades
General Plan Designations	**Low Density Residential**	**Riparian Corridor**	**Parks and Open Space** *OR* No Change w/ Conservation Easement	Haul Road: **Parks and Open Space** Property 1: **Parks and Open Space** Property 2: **Riparian Corridor**
Zoning Designations	**P (R1-10)**	**OS (Open Space)** *OR* PR (Parks and Recreation) under public ownership	**OS (Open Space)** *OR* PR (Parks and Recreation) under public ownership *OR* No Change w/ Conservation Easement	Haul Road: **No change** *OR* PR (Parks and Recreation) under public ownership Property 1: **FP-o (Private Recreation – outdoor)** Property 2: **OS (Open Space)** *OR* PR (Parks and Recreation) under public ownership
Subdivision	**18 lots plus common areas**	**Separate parcel**	**Separate parcel** *OR* lot merger with old quarry site	n/a
Dedication Instrument	n/a	**Irrevocable offer of dedication to City in fee title**	**Irrevocable offer of dedication to City in fee title** *OR* Two-layer offer:	Haul Road: **Irrevocable offer of dedication to City in fee title** Property 1: **Trade to golf course**

Table 3.7-1: Summary of Entitlement Options				
	Residential Parcel	**Corridor Parcel**	**Park Parcel**	**Dedications and Land Trades**
			Layer 1- Parcel in fee title, and Layer 2 - Only trail alignments in easements	*OR* Irrevocable offer of dedication to City in fee title for future trade to golf course <u>Property 2</u>: **Trade to applicant and Irrevocable offer of dedication to City in fee title** <u>Old Quarry Site</u>: **Irrevocable offer of dedication to City in easement for trails** <u>Parking Lot</u>: **Irrevocable offer of dedication to City in easement** *OR* Lot line adjustment and Irrevocable offer of dedication to City in fee title
Bold = Proposed by project applicant.				

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND DISCUSSION OF IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370).

This Initial Study is identified as both a "project specific" Initial Study and a "program level" document. The proposed project includes various levels of entitlement on several parcels that will occur over a period of time, and addresses impacts in varying degrees of specificity.

The mitigation measures that are appropriate to the types of approvals being considered also differ in terms of their specificity and degree of entitlement. CEQA requires that mitigation measures should be "fully enforceable" but also acknowledges that impacts from adoption of a plan or policy can best be mitigated by measures incorporated into the plan or policy [CEQA Guidelines Section 15126.4(a)(2)].

Residential Parcel

The new General Plan land use designation and Planned Development zoning that is part of the project considered in this Initial Study is expected to be implemented after project approval. Because there is currently specific information on the location and extent of physical effects of this development on the environment, the impacts of the proposed development of 18 residential units on the Residential parcel is addressed at a project level. Impacts and mitigation measures for development of the Residential parcel are prefaced by the initials PD (Planned Development).

Corridor and Park Parcels & Offsite Dedications, Easements, and Land Trades

The proposed General Plan land use designations (*Riparian Corridor* and *Parks and Open Space)* and rezoning to *OS, Open Space* reflect a proposed change in intended uses for the Corridor and Park parcels. No specific development is proposed at this time and the stated purpose is to protect the riparian corridor and open space.

Potential offsite land trades, land dedication of the historic haul road located between McClellan Ranch Preserve and Linda Vista Park, and the City's possible acceptance of trail and parking lot easements on the old quarry site east of the Residential, Corridor, and Park parcels are also addressed in this Initial Study.

General Plan policies represent the City's standards governing future land use. Where there is no specific site design developed at this time for the land uses planned in these areas, the City's adopted

policies represent the most likely indication of what would be approved in the future. For the purposes of this Initial Study, it is assumed that approvals would be limited to a new parking lot for up to 12 parking spaces and new or improved trail facilities that would connect to Stevens Creek County Park and/or Fremont Older Open Space Preserve, Linda Vista Park and McClellan Ranch Preserve. Possible trail alignments and designs are described above and in the Parkside Trails Feasibility Study, attached to this Initial Study as Appendix A. However, the project does not commit the City to constructing any of the possible future trails, and the trail alignments and design for the possible trails are uncertain at this point. Therefore, mitigation measures specific to the offsite dedications, easements and land trades, as well as other offsite improvements that will be included in the project Development Agreement, are prefaced by the letters DA (Development Agreement). These measures will be incorporated in the proposed Development Agreement and implemented, as appropriate, as part of acceptance of easements and/or dedications, sidewalk construction, and/or any future trail or 12-space parking lot construction.

4.1 AESTHETICS

4.1.1 Setting

4.1.1.1 *42.4-acre Site*

The 42.4-acre site (i.e., Residential, Corridor, and Park parcels) is undeveloped and partially located on a hillside at the edge of suburban development. The visual character of the land associated with the 42.4-acre site is that of open space. The site is heavily wooded with a network of trails. Stevens Creek runs through the site on the Corridor parcel. Public views of the project site are best from the south and east (i.e., Fremont Older Open Space Preserve, Stevens Creek County Park, and Stevens Canyon Road), but are limited by existing trees and vegetation. Topography, trees, and existing residences limit views of the project site from the north and east. Views of the 42.4-acre site are shown in Photos 1 and 2. The site is not on a visually prominent ridgeline that can be viewed from areas of the valley floor in the City of Cupertino.

4.1.1.2 *Offsite Dedications, Easements, and Land Trades*

The visual character of the land associated with the offsite dedications, easements, and land trades is that of open space with a network of trails and fire breaks (refer to Photos 3 and 4). The land is undeveloped, except for the slender portion of an existing golf course fairway that is part of the proposed land trade (i.e., Property 1). The land is heavily vegetated with trees and shrubs (except for the walls and floor of the old quarry) and varies in topography with steep slopes, ridgelines and drainages, and sheer cliffs over 100 feet tall. The historic haul road is a long, slender parcel that slopes gently down to the north with trees, shrubs, grasses and a dirt trail along its entire length.

PHOTO 1: View of the 42.4-acre project site taken from an existing fire road/trail on the Park parcel looking north.

PHOTO 2: View of the existing residences along the north boundary of the Residential parcel, taken from the northeast corner of the Residential parcel looking northwest.

PHOTO 3: View of the former quarry property from the southwest corner of the property looking northeast.

PHOTO 4: View across the quarry pit from the southwestern wall looking northeast.

4.1.1.2 *Surrounding Visual Character*

42.4-acre Site

The visual character of the area surrounding the 42.4-acre site is that of suburban development and open space (refer to Photos 1-4) with a network of trails and fire breaks. Stevens Canyon Road is located to the west, and residences are located to the north, and east of the project site, adjacent to the Residential parcel. Open space and undeveloped land are located west, south and east of the Corridor and Park parcels. The open space adjacent to the Corridor and Park parcels includes portions of Stevens Creek County Park and Fremont Older Open Space Preserve to the west and south. The open space and undeveloped land varies in topography and vegetation with steep slopes, ridgelines and drainages, and cliffs and riparian corridors, grasslands, chaparral, and woodlands.

Offsite Dedications, Easements, and Land Trades

Similar to the 42.4-acre site, the visual character of the area surrounding the land associated with the offsite dedications, easements, and land trades is that of suburban development and open space. Undeveloped land, large lot estates with private roads, residences, public parks, and a golf course surround these parcels (refer to Photos 1-4).

4.1.1.3 *Scenic Views*

The Montebello foothills at the south and west boundaries of the valley floor provide a scenic backdrop to the City of Cupertino. The 42.4-acre site and the land associated with the offsite dedications, easements, and land trades are not prominent features within the viewshed of a designated scenic vista or readily visible from the valley floor.

The site borders Stevens Canyon Road. Stevens Canyon Road is designated as a Scenic Rural Route from Highway 9 to Stevens Creek Boulevard by the County of Santa Clara on its Regional Parks and Scenic Highways Map Element of the Santa Clara County General Plan. The project site is not visible from State Designated Scenic Highways (e.g., Highway 9).

4.1.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1,2,26
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1,2,3

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1
4. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1

4.1.3 Discussion of Impacts

Aesthetic values are very subjective. Opinions as to what constitutes a degradation of visual character will differ among individuals. One of the best methods for assessing what constitutes a visually acceptable standard for new buildings are the City's design standards and implementation of those standards through the City's design process. The following discussion addresses the proposed changes to the visual setting of the project area and factors that are part of the community's assessment of the aesthetic values of a project's design.

4.1.3.1 *Public Views*

CEQA is concerned with whether a project may affect the environment of persons in general, not whether it will affect particular persons. Therefore, in the context of aesthetic impacts of a proposed project, CEQA requires agencies to analyze whether a project will have significant impacts on public views. Consistent with CEQA, the vantage points for the photosimulations were selected based on their ability to represent public views of the project. Three adjacent public viewpoints were selected.

4.1.3.2 *42.4-acre Site*

Impact to Scenic Views or Scenic Resources

The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. Construction of the 18 single-family residences may include extending the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel as part of the project Development Agreement. The residential development would occur adjacent to existing residences located on Ricardo Road and Canyon Vista Court. While the proposed residences would modify views from the rear yards of the existing residences on Ricardo Road that back up to the project site, the project would not affect views of the scenic open space from public viewpoints in the greater surrounding area. Views of the residential development from the north and east would be mostly blocked by the existing, adjacent residences and trees in the project area.

The proposed residential development would be visible from a segment of Stevens Canyon Road, primarily in the northbound direction. This roadway is not designated as a scenic road or important City gateway in the City of Cupertino General Plan and the proposed residences would not be on a prominent hillslope visible from substantial areas of Cupertino when viewed from the valley floor.

Stevens Canyon Road is designated a Scenic Rural Route in the County of Santa Clara General Plan. The proposed residences, retaining wall, and wall along the Stevens Canyon Road frontage would be visible from a short segment of the roadway (approximately 700 linear feet) and from the adjacent Stevens Creek County Park parking lot. Views of the proposed residences, retaining wall, and wall from Stevens Canyon Road would be fleeting and primarily from the northbound direction. Views of the proposed residences, retaining wall, and wall from northbound Stevens Canyon Road would largely be blocked by the existing trees, vegetation, and embankments along Stevens Canyon Road until within approximately 700 feet of the Residential parcel. Views of the proposed residences and wall from southbound Stevens Canyon Road would be blocked by existing vegetation and trees up until directly adjacent to the Residential parcel. The retaining wall along the private street onsite would not be visible from the southbound direction. Views of the Residential parcel from the roadway and parking lot are shown on Figures 4.1-1 and 4.1-3. The wooded hillsides in the background will remain visible from these view points; although, structures (walls, buildings) and landscaping will be present in the foreground views. In time, the proposed landscaping will soften views of the proposed residences from Stevens Canyon Road and the parking lot, helping the proposed residences blend with the existing residences abutting the northern and eastern site boundaries. For these reasons, the proposed project would not substantially affect views from Stevens Canyon Road or Stevens Creek County Park.

The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict the use of these parcels to open space, thereby preserving existing views of the large majority of the project site. For these reasons, the proposed residences and subdivision of the 42.4-acre parcel would not result in significant impacts to scenic views or scenic resources. **(Less Than Significant Impact)**

Change in Visual Character

The proposed subdivision of the 42.4-acre site would change the visual character of the 8.5-acre Residential parcel upon which the development of 18 single-family residences is proposed. The visual character of buildings is a function of design features, including roof design (e.g., flat versus pitched or sloping roofs), fenestration (window design), and building height. Building heights within a structure can also be varied (or modulated) in ways that add interest or soften a building's appearance. This can reduce the apparent mass of a building and create an appearance that fits into an area with different heights and varying roof styles. The design of building entrances, including use of awnings or porches can also reduce the mass and perception of overall building scale at street and pedestrian interfaces.

Photosimulations, as viewed from northbound and southbound Stevens Canyon Road and the County Park, are shown in Figures 4.1-1, 4.1-2 and 4.1-3, respectively. As shown in Figure 3.2-3, the building pads for the proposed two-story residences would be stepped down from Stevens Canyon Road and the adjacent residential properties to the north. To soften views of the new development, new trees would be planted on the site and along the private street frontage.

Suburban residential development, including a mix of newer and older, larger and smaller, one- and two-story residences, is located north and east of the Residential parcel. Open space is located south and west of the Residential parcel. The Residential parcel is contiguous with and currently resembles in appearance the surrounding open space located to the south and west. Upon project completion, the 8.5-acre parcel would be contiguous with and resemble in appearance the surrounding suburban residential development located north and east of the project site. The building size and conceptual elevations for the proposed residences are similar to the larger single-family residences in the project area. Residences allowed on the site, therefore, would not substantially degrade the visual character and quality of the project site or area.

The proposed subdivision of the 42.4-acre site would change the visual character of the 8.5-acre Residential parcel upon with the development of 18 single-family residences, as discussed above. While the development of residences would change the appearance of the Residential parcel, the change would be similar to the appearance of the existing residential development in the project area. The remaining 33.9 acres would remain as is, and the General Plan amendments and rezonings proposed on this remaining portion of the site would restrict the use of these parcels to open space. For these reasons, the proposed residences and subdivision of the 42.4-acre parcel would not substantially change the visual character of the project area. **(Less Than Significant Impact)**

Light and Glare Impacts

The proposed residences would have windows and lighting (e.g., streetlights) typical of residential development and would be similar to existing residential development located north and east of the project site. The project, therefore, would not result in substantial light or glare impacts that would adversely affect the surrounding residences. As discussed in Section 4.4, Biological Resources, (MM BIO-1.4) lighting on the Residential parcel would be designed and installed to avoid spillover onto the adjacent riparian habitat along Steven Creek. For these reasons, the proposed residences and subdivision of the 42.4-acre parcel would not substantially change the visual character of the project area. **(Less Than Significant Impact)**

4.1.3.3 *Offsite Dedications, Easements, and Land Trades*

The proposed project includes several offsite components, including land dedications, trail and parking lot easements, and a land trades. The land trades would not facilitate future development, or otherwise increase the potential for aesthetic impacts in the project area, because the land trades would rezone the undeveloped land currently owned by Deep Cliff Course *Open Space* (which would restrict future development on the undeveloped land) and would rezone the land developed with a golf course and currently owned by the applicant *Private Recreation-outdoor* (which is consistent

PHOTOSIMULATION 1 - EXISTING AND PROPOSED VIEWS OF THE PROPOSED RESIDENTIAL DEVELOPMENT FROM NORTHBOUND STEVENS CANYON ROAD FIGURE 4.1-1

Existing

Proposed

PHOTOSIMULATION 2 – EXISTING AND PROPOSED VIEWS OF THE PROPOSED RESIDENTIAL DEVELOPMENT FROM SOUTHBOUND STEVENS CANYON ROAD FIGURE 4.1-2

PHOTOSIMULATION 3 – EXISTING AND PROPOSED VIEWS OF THE PROPOSED RESIDENTIAL DEVELOPMENT FROM THE PARKING LOT OF STEVENS CREEK COUNTY PARK FIGURE 4.1-3

with the existing golf course use). The land dedications, including the former haul road and trail and parking lot easements through the old quarry property, could allow for the future construction of a parking lot and trail connecting McClellan Ranch Preserve to Linda Vista Park (i.e., former quarry haul road) and trails connecting Linda Vista Park, Stevens Creek County Park and Fremont Older Open Space Preserve. Trails would be designed in accordance with County of Santa Clara and/or City of Cupertino trails standards, and would be four to ten feet in width. Tree and woody vegetation removal would generally be limited to a narrow trail corridor. Trails would be most visible where switchbacks extend up hillsides or where retaining walls or elevated walkways are installed, though views of trails from public view points, such as Linda Vista Park or Stevens Creek County Park, would be limited by vegetation and topography. Lighting for the parking lot would be minimal, as the park is currently open daylight hours to one hour after sunset and use of the parking lot would likely be limited to park hours. The trails would not be lit. There are existing informal trails throughout the former quarry site. Future trail construction would be similar to the existing informal trail network, and constructing trail connections may decrease current dispersed informal trail use. While new trails and a 12-space parking lot to serve trail users could modify the visual character of the former quarry and former quarry haul road, due to their size, location, and visibility from public vantage points, they would not significantly impact scenic resources or the visual quality of the area. For these reasons, constructing a trail on the former quarry haul road and trails and a 12-space parking lot on the quarry property would not substantially change the visual character of the landscape, increase light or glare, or damage scenic resources in the project area. **(Less Than Significant Impact)**

4.1.4 Conclusion

The proposed project would not result in significant visual or aesthetic impacts. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FOREST RESOURCES

4.2.1 Setting

4.2.1.1 *Agricultural Resources*

Except for the former quarry haul road between McClellan Ranch Preserve and Linda Vista Park, the 42-acre project site and the land associated with the offsite easements and land trades is designated as *Other Land* on the County's Important Farmland Map.[8] The former haul road parcel is designated *Urban and Built-up Land*. *Other Land* is land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as *Other Land*. *Urban and Built-Up Land* is defined as residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water control structures.

The project site is not zoned or used for agricultural purposes. The site is located within the City of Cupertino and is zoned for residential uses. There are no properties adjacent to the site used or zoned for agricultural uses.

4.2.1.2 *Forest Resources*

The California Public Resources Code governs forestry, forests, and forest resources, as well as range and forage lands, within the state. "Forest land" is defined by Public Resources Code §12220(g) as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Similarly, "timberland" is defined by Public Resources Code §4526 as, "land, other than land owned by the federal government..., which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."

Chapter 6.7 of the California Government Code (§§51100-51155) regulates timberlands within the state. "Timberland production zone" is defined in §51104(g) as an area that has been zoned pursuant to Government Code §51112 or 51113 and is devoted to and used for growing and harvesting timber or compatible uses (e.g., watershed management or grazing).

The project site and the surrounding area is located within the City of Cupertino and is generally zoned by the City for residential uses, except for land to the west of the project site, which is zoned for open space/public park. The project site and surrounding area is not zoned as forest land, timberland, or timberland production zone.

[8] California Department of Conservation. Santa Clara County Important Farmland 2010. Map.

4.2.1.3 *Williamson Act*

The Williamson Act (Government Code §51200 et seq.) authorizes local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use in exchange for beneficial tax treatment. Its intent is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The project site is not subject of a Williamson Act contract.

4.2.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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?	☐	☐	☐	☒	1,5
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1
3. Conflict with existing zoning for, or cause rezoning of, forest land [as defined in Public Resources Code section 12220(g)], timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production [as defined by Government Code section 51104(g)]?	☐	☐	☒	☐	6
4. Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐	1,4,6
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐	1,4,6

4.2.3 Discussion of Impacts

4.2.3.1 *Agricultural Resources Impact*

As discussed above, the project site and surrounding area are not designated, zoned or used as farmland or for agricultural purposes. The development of the project site, including the Residential parcel and possible offsite parking lot and trail alignments, would not result in conversion of farmland to non-agricultural use. For these reasons, the proposed project would not result in any significant impacts to agricultural resources. **(No Impact)**

4.2.2.2 *Forest Resources Impact*

Although it appears the project site can support 10 percent native tree cover under natural conditions, neither the project site nor the properties adjacent to the project site are used or zoned for forestry or timberland uses. The project site is located within the City of Cupertino and is zoned for residential uses. For these reasons, the proposed project would not result in the loss or conversion of forest or timberland resources. **(No Impact)**

4.2.3 Conclusion

The proposed project would not result in significant impacts to agriculture or forestry resources. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based, in part, upon a community risk assessment prepared by *Illingworth & Rodkin, Inc*., which is included as Appendix B of this Initial Study.

4.3.1 Setting

4.3.1.1 *Climate and Topography*

The City of Cupertino is located in the Santa Clara Valley within the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. This portion of the Santa Clara Valley is bounded to the north by the San Francisco Bay and the Santa Cruz Mountains to the southwest. The surrounding terrain greatly influences winds in the valley, resulting in a prevailing wind that follows along the valley's northwest-southwest axis.

Pollutants in the air can cause health problems, especially for children, the elderly, and people with heart or lung problems. Healthy adults may experience symptoms during periods of intense exercise. Pollutants can also cause damage to vegetation, animals, and property.

4.3.1.2 *Regional and Local Criteria Pollutants*

Major criteria pollutants, listed in "criteria" documents by the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter (PM). These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms.

Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. The Bay Area as a whole does not meet state or federal ambient air quality standards for ground level ozone and $PM_{2.5}$ and state standards for PM_{10}. The area is considered attainment or unclassified for all other pollutants.

4.3.1.3 *Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter*

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). These contaminants tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods.

Fine Particulate Matter ($PM_{2.5}$) is a complex mixture of substances that includes elements (e.g., carbon and metals), compounds (e.g., nitrates, organics, and sulfates), and complex mixtures (e.g., diesel exhaust and wood smoke). Long- and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects.

Common stationary source types of TACs and $PM_{2.5}$ include gasoline stations, dry cleaners, and diesel backup generators that are subject to permit requirements. The other, often more significant, common source is motor vehicles on freeways and roads.

4.3.1.4 *Regulatory Setting*

The City of Cupertino is within the San Francisco Bay Area Air Quality Management District (BAAQMD). BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Air quality standards are set by the federal government (the 1970 Clean Air Act and its subsequent amendments) and the state (California Clean Air Act of 1988 and its subsequent amendments).

Regional air quality management districts, such as the BAAQMD, must prepare air quality plans specifying how state standards are to be met. The BAAQMD's most recently adopted Clean Air Plan (CAP) is the *Bay Area 2010 Clean Air Plan* (2010 CAP). This plan includes a comprehensive strategy to reduce emissions from stationary, area, and mobile sources. The 2010 CAP provides an updated comprehensive plan to improve Bay Area air quality and protect public health, taking into account future growth projections to 2035. Some of these measures or programs rely on local governments for implementation. The 2010 CAP also includes measures designed to reduce greenhouse gas emissions.

4.3.1.5 *Sensitive Receptors*

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, child-care centers, retirement homes, convalescent homes, hospitals and medical clinics. Existing sensitive receptors near the project site include the residences located immediately north and east of the Residential parcel (refer to Figure 2.2-3).

4.3.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,7,8
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,7,8

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,7,8
4. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1,20
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1,20

4.3.3 Discussion of Impacts

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of Cupertino and other Lead Agencies in the San Francisco Bay Area Air Basin often utilize the BAAQMD thresholds and methodology for assessing air emissions and/or health effects, which are based upon the scientific and other factual data prepared by BAAQMD in developing those thresholds.

In December 2010, the California Building Industry Association (BIA) filed a lawsuit in Alameda County Superior Court challenging toxic air contaminant (TAC) and $PM_{2.5}$ thresholds adopted by BAAQMD in its CEQA Air Quality Guidelines (*California Building Industry Association v. Bay Area Air Quality Management District*, Alameda County Superior Court Case No. RG10548693). One of the identified concerns is inhibiting infill and smart growth in the urbanized Bay Area. On March 5, 2012, the Alameda County Superior Court issued a judgment that BAAQMD had failed to comply with CEQA when it adopted its thresholds. The Court issued a writ of mandate ordering the District to set aside the thresholds and cease disseminating them until the District fully complies with CEQA. The BAAQMD appealed this ruling, and the Appellate Court overturned that decision, finding that adopting the thresholds did not amount to a project under CEQA (*California Building Industry Association v. Bay Area Air Quality Management District* (2013) 218 Cal.App.4th 1171). The Court of Appeal also found that the challenged thresholds were supported by substantial evidence. The case is now in front of the state Supreme Court on one issue unrelated to the substance of particular thresholds or the evidence on which they are based.

In April 2012, BAAQMD revised their website in conformance with the superior court order, no longer recommending use of the 2010 thresholds in determining a project's significant air quality impacts. Based on the Appellate ruling, however, it is reasonable for agencies to conclude that the thresholds are based on substantial evidence and that they represent a reasonable method of determining significance. The City has carefully considered the thresholds prepared by BAAQMD

and the recent court ruling, and regards the thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. Therefore, the analysis in this Initial Study is based upon the methodologies and thresholds in the 2011 BAAQMD CEQA Air Quality Guidelines, as updated in 2012.

4.3.3.1 *42.4-acre Site*

Project-Level Significance Thresholds

The thresholds of significance for criteria air pollutants are a net increase of 54 pounds or more per day of reactive organic gas (ROG), nitrous oxide (NO_X), and/or $PM_{2.5}$; or 82 pounds or more a day of PM_{10}.

The BAAQMD CEQA Air Quality Guidelines recommend that projects be evaluated for community risk when they are located within 1,000 feet of freeways, high traffic volume roadways (10,000 average annual daily trips or more), and/or stationary permitted sources of TACs. The thresholds for TACs are an increased cancer risk of greater than 10 in one million, increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or a $PM_{2.5}$ increase equal to or greater than 0.3 $\mu g/m^3$.

Clean Air Plan Consistency

Determining consistency with the 2010 CAP involves assessing whether applicable control measures contained in the 2010 CAP are implemented. Implementation of control measures improve air quality and protect public health. These control measures are organized into five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures (TCMs), Land Use and Local Impact Measures, and Energy and Climate Measures. Applicable control measures and the project's consistency with them are summarized in Table 4.3-1, below. The proposed project is generally consistent with the control measures.

Table 4.3-1: Bay Area 2010 Clean Air Plan Applicable Control Measures

Control Measures	Description	Project Consistency
Transportation Control Measures		
Improve Bicycle Access and Facilities	Expand bicycle facilities serving transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.	The proposed project includes land dedications and trail and parking lot easements that could allow for the future construction of bicycle trails.
Improve Pedestrian Access and Facilities	Improve pedestrian access to transit, employment, and major activity centers.	The proposed project includes land dedications and trail and parking lot

Table 4.3-1: Bay Area 2010 Clean Air Plan Applicable Control Measures

Control Measures	Description	Project Consistency
		easements that could allow for the future construction of pedestrian trails.
Energy and Climate Measures		
Energy Efficiency	Increase efficiency and conservation to decrease fossil fuel use in the Bay Area.	The project is required to comply with the Residential Mandatory Measures of the California Green Building Code. The mandatory measures include water conserving plumbing fixtures and fittings, recycle and/or salvage a minimum of 50 percent of the nonhazardous construction and demolition waste for reuse, and use of low VOC paints.
Tree-Planting	Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, and absorb CO_2 and other air pollutants.	The proposed project will replace all trees removed from the project site per the ratios specified in the City of Cupertino Tree Ordinance.

Short-Term Construction-Related Impacts

Criteria Air Pollutants and Precursors

Construction activities would temporarily affect local air quality. Construction activities such as earthmoving, construction vehicle traffic, and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water based paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

Construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere. Construction activities would increase dustfall and locally elevated levels of PM_{10} downwind.

The 2011 BAAQMD CEQA Guidelines contains a screening table that lists a minimum number of residential units that could result in significant construction-related air quality impacts. The development of 114 single-family dwelling units is identified by the BAAMQD as potentially resulting in significant construction-related air quality impacts. The screening criteria provide lead agencies with a conservative indication of whether a project could result in significant air quality impacts.

The project, which proposes to construct 18 single-family residences, is well below the BAAQMD screening threshold of 114 single-family residences; therefore, the construction of the proposed residences would not generate a significant amount of construction-related criteria pollutant emissions. For all proposed projects, BAAQMD recommends implementation of the Basic Construction Mitigation Measures whether or not construction-related emissions exceed applicable thresholds.

Standard Project Conditions: Consistent with the BAAQMD CEQA Air Quality Guidelines, the project shall implement the following dust and construction equipment exhaust control measures to reduce construction-related air pollutant emissions.

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

Based on the BAAQMD screening levels, project construction criteria pollutant emissions are less than significant. The BAAQMD's Basic Construction Mitigation Measures would be included on project plan documents prior to issuance of any building permits for the construction of residences on the Residential parcel. The proposed project, therefore, would not result in a significant construction-related criteria pollutant air quality impact. **(Less Than Significant Impact)**

Local Community Risks and Hazards

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Health risks from TACs are a function of both concentration and duration of exposure. Because construction of the proposed residences would require substantial grading, would occur adjacent to existing residences, and last more than six months, a community risk assessment was completed. Construction emissions were estimated using the California Emissions Estimator Model,

(CalEEMod) and the U.S. EPA ISCST3 dispersion model was used to predict diesel particulate matter concentrations at the nearest residences. The results of this assessment indicate that the incremental cancer risk would be 2.0 in one million. This predicted excess cancer risk is below the BAAQMD significance threshold of 10 in one million. Construction of the proposed project, therefore, would not significantly increase health risks on adjacent sensitive receptors. **(Less Than Significant Impact)**

Operational Impacts

Criteria Air Pollutants and Precursors

The 2011 BAAQMD CEQA *Air Quality Guidelines* contains a screening table that lists a minimum number of residential units that would result in operational-related emissions over the criteria pollutant thresholds of 54 pounds per day of NO_X or ROG and 82 pounds per day of particulate matter. For residential uses, development of 325 single-family dwelling units is the screening level size for operational-related impacts due to criteria pollutant emissions and their precursors (e.g., NO_X, ROG, particulate matter). The screening criteria provide lead agencies with a conservative indication of whether a project could result in significant air quality impacts. The proposed 18 single-family residences are well below the screening level and, therefore, the project would not result in a significant air quality impact due to emissions of criteria air pollutants and their precursors. **(Less Than Significant Impact)**

Local Community Risks and Hazards Impacts

Diesel Haul Trucks

The proposed residences would be located near Stevens Canyon Road, a designated truck route used by heavy-duty diesel haul trucks going to and from Stevens Creek Quarry, which is located approximately 0.8 miles southwest of the project site. During the preparation of the project traffic and site distance analysis, the haul truck traffic volume on Stevens Canyon Road along the project frontage was estimated by *Fehr & Peers Traffic Consultants* to be 645 round trips per day. The potential health impacts to the residents of the proposed residences from the diesel particulate matter (DPM) and $PM_{2.5}$ haul truck emissions were evaluated using the California Air Resources Board EMFAC2011 on-road emissions model and the U.S. EPA ISCST3 dispersion model. The maximum DPM concentration was 0.0084 $\mu g/m^3$, resulting in increased cancer risks of 4.5 in one million. This predicted excess cancer risk is below the significance threshold of 10 in one million. For non-cancer health effects, the maximum hazard index (HI) at the project site was 0.002, which is much lower than the significance criterion of a HI greater than 1.0. The maximum annual $PM_{2.5}$ concentration was 0.013 $\mu g/m^3$, which is well below the BAAQMD threshold of 0.3 $\mu g/m^3$. For these reasons, future occupants of the proposed residences would not would not be exposed to significant increased health risks. **(Less Than Significant Impact)**

Backup Generator

As described in Section 3.0, *Project Description*, the project would connect to the existing sanitary sewer line in Canyon Vista Court, which would require installing a pump station on the site. Consistent with the requirements of the Cupertino Sanitary Sewer District, the proposed project includes an onsite backup generator to power the lift station in the event of a power failure. The trailer-mounted diesel backup generator (Brand: Magnum; Model: MMG 25 A; KW: 23 KVA; Amp 240) would be tested weekly adjacent to the sanitary sewer lift station. The diesel backup generator would be a source of diesel particulate matter emissions when tested. However, the backup generator is smaller than 50 horsepower and, therefore, exempt from BAAQMD permitting. Backup generators that are exempt from BAAQMD permitting requirements are considered to have less than significant impacts to air quality. **(Less Than Significant Impact)**

Odors

Sanitary sewer lift stations have the potential to emit odors. The BAAQMD considers odor impacts to be significant if they result in frequent complaints. The design and use of the proposed sanitary sewer lift station was reviewed by the project air quality consultant to determine if planned operation would result in a significant odor impact. This station would serve only the project; therefore, the quantity of wastewater would be very low (less than 13 gallons per minute during peak flows). As a result, the potential for odors and frequent complaints is very low. For this reason, the proposed project would not expose a substantial amount of people to objectionable odors. **(Less Than Significant Impact)**

4.3.3.2 *Offsite Dedications, Easements, and Land Trades*

Air quality impacts are typically the result of dust and emissions generated during construction and vehicular traffic generated during project operation. The offsite components, including dedication of the former quarry haul road located between McClellan Ranch Preserve and Linda Vista Park, trail and parking lot easements through the old quarry property, and a possible land trade with Deep Cliff Golf Course, could allow for the future construction of trails and a parking lot with up to 12 spaces. Construction of most future trails would occur at a distance from residential uses, thereby minimizing any impacts of dust and particulate emissions. The possible trail along the old haul road, however, would be located near residences and could require the use of earth moving equipment for construction.

DA Impact AIR-1: Trail construction along the former quarry haul road located between McClellan Ranch Preserve and Linda Vista Park could generate dust and particulates affecting nearby residences. **(Significant Impact)**

DA MM AIR-1.1: Consistent with the BAAQMD CEQA Air Quality Guidelines, the following dust and construction equipment exhaust control measures to reduce construction-related air pollutant emissions shall be implemented in the event future trails are constructed:

- 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 onsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All areas to be paved shall be completed as soon as possible. Parking lot pavement shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer‘s specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

Some users of Linda Vista Park and Stevens Creek County Park currently walk on the Park parcel and old quarry site. Operation of the future trails and parking lot would not generate substantial traffic above baseline levels or otherwise result in a significant air quality impact. For these reasons, the project would not result in significant air quality impacts related to possible future offsite dedications, easements and land trades. **(Less Than Significant Impact with Mitigation)**

4.3.4 Conclusion

The proposed 18 residences would not exceed the criteria pollutant emissions thresholds or place sensitive receptors in an area subject to significant risks from TACs. In addition measures to further reduce air pollutant emissions would be implemented during construction of the residences. For these reasons, the construction and operation of the proposed 18 residences would not result in significant air quality impacts. **(Less Than Significant Impact)**

DA Impact AIR-1: Trail construction along the former quarry haul road located between McClellan Ranch Preserve and Linda Vista Park could generate dust and particulate emissions affecting nearby residences. Consistent with the BAAQMD CEQA Air Quality Guidelines, dust and construction equipment exhaust control measures to reduce construction-related air pollutant emissions would be implemented during possible future trail construction. The BAAQMD’s Basic Construction Mitigation Measures would be included on future trail construction documents. Possible future trail construction along the former quarry haul road located between McClellan Ranch Preserve and Linda Vista Park, therefore, would not result in a significant construction-related criteria pollutant air quality impact. **(Less Than Significant Impact with Mitigation Incorporated)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on a biological resources report prepared by *H.T. Harvey & Associates* in May 2014 and a tree survey completed by *HortScience, Inc.* in April 2014 for the Residential parcel. A copy of the biological resources report is included in Appendix C and the tree survey is included in Appendix D of this Initial Study.

The discussion of the remainder of the 42.4 acre site and offsite dedication areas is based, in part, on the Parkside Trails Feasibility Study (Jana Sokale Environmental Planning, et al., June 2014) (Appendix A). The trail connections shown in the Parkside Trails Feasibility Study were identified for initial planning and scoping purposes and may not reflect ultimate trail alignments. As stated previously, the intent of the trails feasibility study was for the City to assess the potential cost and process for developing trails. Preparation of the trails feasibility study should not infer actual construction of the trails described in the report.

Common names of plants and animals are used in the following discussion, except where noted. Refer to Appendix C for scientific names of the species found or expected on or near the project site.

4.4.1 Setting

4.4.1.1 *Existing Conditions*

Residential Parcel

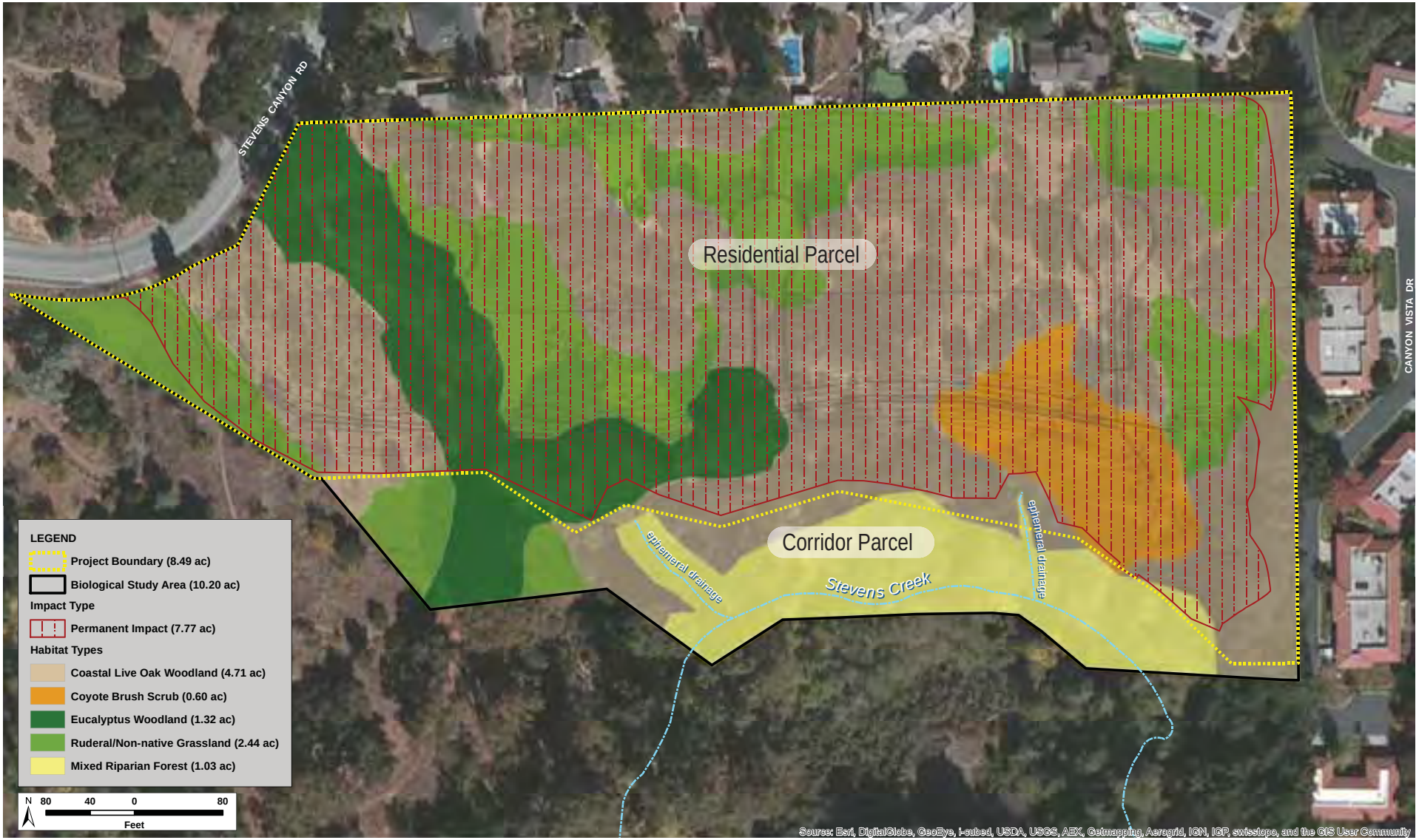
The approximately 8.5-acre Residential parcel is located off Stevens Canyon Road, immediately south of existing residences on Ricardo Road in the City of Cupertino. There are no extant buildings on the parcel. The following discussion describes the existing biological resources found on and adjacent to the Residential parcel. This area on and adjacent to the Residential parcel is referred to as the "study area" for the Residential parcel throughout the following discussion.[9]

Vegetation

The vegetation on and/or adjacent to the Residential parcel is composed of a mixture of ruderal/non-native annual grassland, eucalyptus woodland, coyote brush scrub, coastal live oak woodland (post-quarry regrowth), mixed riparian forest, and aquatic habitats. Historic aerial photographs reviewed by *H.T. Harvey & Associates* show that the majority of the study area was cleared of its original native vegetation sometime prior to 1948, possibly for use as cropland or rangeland. The majority of the Residential parcel now supports a mix of ruderal/non-native grassland with secondary growth coast live oak woodland.

Habitats on and adjacent to the Residential parcel are shown on Figure 4.4-1. Ruderal/non-native grassland is dominated by exotic annual grasses including wild oats, ripgut brome, softchess, Italian

[9] The riparian corridor of Stevens Creek is primarily located on the Corridor parcel. As habitat in this area could be affected by development on the adjacent Residential parcel, it is included in the study area for the Residential parcel.



HABITAT MAP

FIGURE 4.4-1

Photo 5:
Ruderal/Non-native grassland.

Photo 6:
Eucalyptus woodland along entry road.

Photo 7:
Coastal live oak woodland (post-quarry regrowth).

ryegrass, and smilo grass (Photo 5). Other common species in grassland areas include Italian thistle, yellow star thistle, hedgeparsley, rose clover, stinkwort, and coyote brush seedlings.

Photo 8: Coyote brush scrub

Mature eucalyptus (blue gum) trees line the entryway to the property and portions of an abandoned roadway (Photo 6). Coastal live oak woodland is scattered throughout the upper portion of the project site (Photo 7). This habitat supports many of the same understory species as the ruderal/non-native grassland habitat but also contains an overstory of mature coast live oak trees.

Coyote brush scrub is located in the eastern portion of the Residential parcel, above Stevens Creek (Photo 8). The Coyote brush scrub is dominated by coyote brush and supports a number of other native shrubs including California sagebrush, sticky monkey flower, toyon, and buckbrush.

Mixed riparian forest is located along Stevens Creek near the Residential parcel and supports a diverse mix of native riparian trees including Fremont cottonwood, boxelder, California sycamore, bigleaf maple, and arroyo willow (Photo 9). Stevens Creek is a perennial stream tributary to the San Francisco Bay. Water flow is regulated at the Stevens Creek Dam (upstream of the site) and varies throughout the year. Near the Residential parcel, the streambed is sandy and gravelly with scattered large cobbles, boulders, and organic detritus. The ordinary high water mark (OHWM) of Stevens Creek in the study area varies between 10 and 15 feet above the creek bed. The riparian understory is composed of a mix of native and invasive species. Common native species include California blackberry, stinging nettle, tall flatsedge, and sneezeweed. Common invasive species include poison hemlock, greater periwinkle, English ivy, and scotch broom. Two ephemeral streams[10] occur in the study area (Figure 4.4-1). The stream located on the west side of the study area is approximately 145 feet long and has an OHWM approximately one foot above the streambed. The stream located on the east side of the study area, is approximately 90 feet long and has an OHWM approximately 0.5 feet above the streambed.

Photo 9: Mixed riparian forest and aquatic habitats along the adjacent Stevens Creek corridor.

[10] An ephemeral stream flows for a short period during and following a period of rainfall.

Wildlife

The habitats on and adjacent to the Residential parcel are very similar to habitats found in nearby open spaces, including Stevens Creek County Park (directly adjacent to the project site), and Fremont Older Open Space Preserve to the south. Many terrestrial wildlife species that occupy these relatively undeveloped habitats may disperse into or through the Residential parcel, which provides suitable habitat for a variety wildlife species, especially those that are adapted to low to moderate levels of human disturbance.

The ruderal/non-native annual grassland within the study area provides habitat for many common wildlife species. Several black-tailed deer and small mammals such as deer mice and Botta's pocket gophers are common residents of annual grasslands. These small mammals attract mammalian predators such as coyotes and bobcats. Although few species of birds are likely to nest in the grassland habitat on the Residential parcel due to its limited size, several species that nest in the adjacent woodland areas forage on the Residential parcel, including bushtits, Anna's hummingbirds, spotted towhees, Bewick's wrens, dark-eyed juncos, and western scrub-jays. Reptiles, including the western fence lizard and gopher snake, also occur in the grassland habitat.

The coyote brush scrub habitat on the Residential parcel provides cover for wildlife species that forage in the adjacent woodland and grassland habitats. Examples of bird species that are found in this habitat include the Bewick's wren, California quail, and spotted towhee during the nesting season and fox sparrows during the winter. Reptiles such as the coast garter snake and the western fence lizard are found here, and mammals using this habitat include the brush rabbit, California pocket mouse, gray fox, and bobcat.

The oak and eucalyptus woodland habitats on the Residential parcel support many common species of amphibians, reptiles, birds, and mammals, although many species are expected to be less common in the non-native eucalyptus woodlands than in the native oak woodlands. California slender salamanders can be found under rotting logs, and southern alligator lizards search for prey in the leaf litter and duff under the trees in woodland habitats. Reptiles found in adjacent grassland and scrub habitats also occur regularly in the woodland habitats. Mature oak trees bear natural cavities, which are important resources for cavity-nesting birds and small mammals. Western scrub-jays, acorn woodpeckers, oak titmice, Nuttall's woodpeckers, chestnut-backed chickadees, and white-breasted nuthatches are year-round residents in oak woodland habitat in Santa Clara County. The deer mouse, California mouse, and introduced eastern gray squirrel nest and forage in woodland habitats. Several San Francisco dusky-footed woodrat nests, a California species of special concern, were found in the oak woodland on the Residential parcel. Bats, such as the California myotis and long-eared myotis, may use hollows of larger, older oak trees for roosting.

Riparian communities are among the most important habitats for wildlife because of their high floristic and structural diversity, high biomass (and therefore high food abundance), and high water availability. In addition to providing breeding, foraging, and roosting habitat for a diverse array of animals, riparian communities provide movement corridors for some species, connecting a variety of habitats throughout a region. The maturity of the mixed riparian forest habitat adjacent to Stevens Creek supports high densities and a high diversity of riparian birds and mammals. Breeding birds that are likely to use this habitat include Neotropical migrant species such as the Pacific-slope

flycatcher, warbling vireo, and black-headed grosbeak, as well as the resident downy woodpecker and spotted towhee. In addition, numerous other bird species use the riparian habitat for foraging and cover during migration and winter. Trees with cavities or loose bark may provide roosting habitat for bat species, including the California myotis and long-eared myotis, year-round. The hoary bat and western red bat, which roost in the foliage of trees in riparian habitats, may occur in the study area during migration and winter. The mixed understory, leaf litter, and fallen branches associated with the riparian community supports a variety of amphibians and reptiles, including the slender salamander, arboreal salamander, western toad and Sierran chorus frog. The western fence lizard, western skink, and southern alligator lizard are also expected to occur here, as are several snake species, including the western rattlesnake, racer, and common kingsnake. A variety of mammals also occurs in riparian woodlands. Small mammals, such as the ornate shrew, California vole, Botta's pocket gopher, and deer mouse may burrow or find refuge in dense grass or brushy thickets in riparian areas, and predators, such as the raccoon, long-tailed weasel, coyote, and bobcat, are attracted to riparian woodlands by the abundance of prey and cover.

Stevens Creek aquatic habitat supports several native and introduced fish species including the native three-spine stickleback, California roach, Sacramento sucker, and Central California Coast steelhead. Non-native species present are reported to include the mosquito fish and carp. Amphibians expected to occur here include the Sierran chorus frog and western toad. In addition, birds such as the mallard and belted kingfisher may forage in the aquatic habitat along Stevens Creek.

Corridor and Park Parcels

The 4.1-acre Corridor parcel primarily supports mixed riparian forest, coast live oak woodland, and aquatic habitat along Stevens Creek (refer to Figure 4.4-1).

The 29.8-acre Park parcel contains primarily coast live oak woodland and chaparral. In addition to oaks, a diverse range of shrubs and woody plants are found in these habitats including ceanothus, chamise, manzanita, toyon, coyote brush, California sage, chaparral currant, sticky monkeyflower, California blackberry, and poison oak.

Wildlife that use the habitats within the Corridor and Park parcels include black-tailed deer, bobcat, coyote, raccoon, opossum, cottontail rabbit and other species also found associated within the Residential parcel, as described above.

Offsite Dedications, Easements, and Land Trades

The historic haul road area consists of a compacted roadbed bordered by non-native grassland, coast live oaks, and patches of scrub habitat. The old quarry property contains a mosaic of habitats within the formerly active quarry. Habitats include non-native grassland, coast live oak woodland, chaparral, seasonal freshwater wetland, mixed and cottonwood-dominated riparian forest and aquatic habitat. Modifications to tributary streambeds on the quarry floor have resulted in ponding and the formation of wetland habitat on the quarry floor and at the base of steep excavated slopes. These seasonal freshwater wetland areas support cattails, rush, and marsh baccharis and provide habitat for

amphibians, possibly including California red-legged frog.[11] The trail and parking lot easements on the old quarry site could cross the habitats described above. The two properties subject to the proposed land trade primarily support turfgrass and landscaping (Property 1) and mixed riparian forest (Property 2).

4.4.1.2 *Special-Status Species*

Special-status species are plants and animals that are legally protected under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing.

For purposes of this Initial Study, special-status plants include the following:

- Plants listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Plants listed under CESA as threatened, endangered, rare, or a candidate species.
- Plants listed by the California Native Plant Society (CNPS) as rare or endangered on California Rare Plant Rank (CRPR) lists 1A, 1B, 2, 3, or 4.

For purposes of this Initial Study, special-status animals include the following:

- Animals listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Animals listed under CESA as threatened, endangered or a candidate threatened or endangered species.
- Animals designated by the CDFW as a California species of special concern.
- Animals listed in Sections 3511, 4700, 5050, or 5515 the California Fish and Game Code as a fully protected species.

Information concerning threatened, endangered, and other special-status species that occur in the project area was collected from several sources and reviewed to develop a list of species potentially occurring in the study area (refer to Appendix C). The specific habitat requirements and the locations of known occurrences of each special-status species were the principle criteria used for inclusion in the list of species potentially occurring in the study area.

Special-Status Plants

The California Native Plant Society identifies 95 special-status plant species that occur in Santa Clara County[12] or in at least one of the nine quadrangles that contain or surround the study area.[13] All of these special-status species were determined to be absent from the study area due to one or more of the following reasons:

[11] Jana Sokale Environmental Planning, et al. Parkside Trails Feasibility Study. June 2014.
[12] California Rare Plant Rank (CRPR) 4 species.
[13] For CRPR 1A, 1B, 2A, 2B, or 3 species.

- A lack of specific habitat and/or or edaphic requirements for the species.
- The species is known to be extirpated from the area.
- The study area is outside the highly endemic range of the species.
- The elevation range of the species is outside of the range in the study area.
- Degraded habitat conditions in the study area are not likely to support the species.

The California Natural Diversity Database (CNDDB)[14] identifies nine special-status plant species as historically occurring within the project vicinity. These are woodland woolythreads (*Monolopia gracilens*), Santa Clara red ribbon (*Clarkia concinna* ssp. *automixa*), western leatherwood (*Dirca occidentalis*), Loma Prieta hoita (*Hoita strobilina*), Indian Valley bush-mallow (*Malacothamnus aboriginum*), arcuate bush-mallow (*Malacothamnus arcuatus*), Kings Mountain manzanita (*Arctostaphylos regismontana*), Ben Lomond buckwheat (*Eriogonum nudum* var. *decurrens*), and Anderson's manzanita (*Arctostaphylos andersonii*). According to CNDDB records, these occurrences are generally in undeveloped areas and/or have edaphic requirements (e.g. serpentine, sand, etc.) that are not present in the study area. Therefore, these nine species were determined to be absent from the study area.

Special-Status Animals

Several special-status animal species are known to occur in the project region. Some of these species, however, were determined to be absent from the study area due to a lack of suitable habitat or to evidence that the species does not occur in the study area.

Seven special-status animal species are known or expected to occur within the study area. These are the Central California Coast steelhead, California red-legged frog, western pond turtle, white-tailed kite, yellow warbler, pallid bat, and San Francisco dusky-footed woodrat. Each of these species is discussed in greater detail below.

Central California Coast steelhead (*Oncorhynchus mykiss*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern.

The steelhead is an anadromous form of rainbow trout that migrates upstream from the ocean to spawn in late fall or early winter, when flows are sufficient to allow it to reach suitable habitat in far upstream areas. In the project region, adults typically migrate to spawning areas from late December through early April, and both adults and smolts migrate downstream from February through May. Steelhead typically spawn in gravel substrates located in clear, cool, perennial sections of relatively undisturbed streams, with dense canopy cover that provides shade, woody debris, and organic matter. Steelhead usually cannot survive long in pools or streams with water temperatures above 77 degrees Fahrenheit (°F); however, they can use warmer habitats if adequate food is available.

The National Marine Fisheries Service (NMFS) has categorized steelhead into distinct population segments (DPS). Critical habitat for the Central California Coast DPS was designated in September

[14] The CNDDB is a subscription "natural heritage program" that provides location and natural history information on special-status plants, animals, and natural communities to the public, public agencies, and conservation organizations.

2005. Stevens Creek within the study area is designated as critical habitat for the Central California Coast DPS. Based upon a SCVWD survey of steelhead habitat and passage conditions in Stevens Creek from 1990 to 1994 and subsequent surveys by resource agencies and the SCVWD, steelhead should be considered present in the stretch of Stevens Creek that extends through the project site.

Stevens Creek Reservoir, upstream of the project site, has held impounded creek flows since 1937. In the late 1990s in response to a legal complaint, the Fisheries and Aquatic Habitat Collaborative Effort (FACHE) was established to research the habitat needs of steelhead, collect information on the effects of different water releases from SCVWD reservoirs, and provide recommendations for managing in-stream habitats for local steelhead populations. Subsequently in 2003, the Santa Clara Valley Water District signed a draft settlement agreement with a range of interested parties[15] to resolve a dispute regarding SCVWD's use of water rights on three waterways, including Stevens Creek. The Agreement specifies near- and longer-term actions to maintain fisheries habitat and in-stream flow needs and identifies a "Cold Water Management Zone" that extends from the Stevens Creek Dam outlets to Interstate 280.[16] The Cold Water Management Zone includes the reach of Stevens Creek that extends through the project site and project vicinity. Releases from Stevens Creek Dam are made in consideration of the findings of FACHE regarding maintaining adequate water depth and temperatures for spawning and rearing of steelhead trout.

California red-legged frog (*Rana draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern.

The California red-legged frog was listed as threatened in June 1996 based largely on a significant range reduction and continued threats to surviving populations. Critical habitat was most recently designated in March 2010. Designated critical habitat is not present within the project site or immediately surrounding area.

The California red-legged frog inhabits perennial freshwater pools, streams, and ponds throughout the Central California Coast Range and isolated portions of the western slope of the Sierra Nevada. Its preferred breeding habitat consists of deep perennial pools with emergent vegetation for attaching egg clusters, as well as shallow benches to act as nurseries for juveniles. Non-breeding frogs may be found adjacent to streams and ponds in grasslands and woodlands, and may travel over two miles from their breeding locations across a variety of upland habitats to suitable nonbreeding habitats. The distance moved is highly site-dependent, however, as influenced by the local landscape.

There are four CNDDB (2014) records of the California red-legged frog within the five mile radius of the study area for the Residential parcel (refer to Figure 3 in Appendix C): one on Permanente Creek, approximately 1.3 miles to the northwest; one at Gate of Heaven Cemetery Pond, approximately 1.5 miles to the northwest; one on Calabasas Creek, approximately 2.6 miles to the

[15] Parties to the draft settlement agreement include the SCVWD, the United States Department of Interior -Fish and Wildlife Service, the United States Department of Commerce- National Marine Fisheries Service, the California Department of Fish and Game (now Department of Fish and Wildlife), the Guadalupe-Coyote Resource Conservation District, Trout Unlimited, the Pacific Coast Federation of Fisherman's Associations, and California Trout, Inc.

[16] Draft Settlement Agreement, *Settlement Agreement Regarding Water Rights of the Santa Clara Valley Water District on Coyote, Guadalupe and Stevens Creeks*, dated June 1, 2003.

south; and one on Saratoga Creek, approximately 3.9 miles to the south-southwest. Although there is an historical record of California red-legged frogs on the west side of Stevens Creek Reservoir to the south of the study area, this population is considered by *H.T. Harvey & Associates* to be extinct. Further, no red-legged frogs were found in Stevens Creek between Stevens Creek Boulevard and McClellan Road, just downstream from the study area, during five focused day and night surveys conducted in 2004 and 2005 by Thomas Reid Associates, although bullfrogs and crayfish, both predators of the California red-legged frog were observed by *Thomas Reid Associates* and reported in 2006.

Aquatic habitats such as Stevens Creek, where flows are relatively consistent and strong, are not typically utilized as breeding habitat by California red-legged frogs because there is a lack of instream aquatic vegetation for frogs to deposit egg masses, and high stream flows can easily wash out egg masses. Therefore, for California red-legged frogs to be present within the study area, potential breeding ponds in nearby upland areas must be close enough for individuals to disperse between these ponds and the study area, and there must be no barriers to dispersal between the breeding ponds and the study area.

Based on an analysis of aerial photographs, potentially suitable California red-legged frog breeding ponds exist approximately 0.3 miles to the northeast of the study area on the Deep Cliff Golf Course. There are no insurmountable barriers (such as multi-lane highways) between the Residential parcel study area and these ponds or the closest known breeding pond located approximately 1.3 miles to the northwest. However, they are separated from the Residential parcel by residential development (e.g., buildings, fences) that likely impedes red-legged frog dispersal to the site. In addition, the distance between the study area and the known breeding pond (1.3 miles) would reduce the number of red-legged frogs that may reach the site from this breeding location. For these reasons, as well as the presence of aquatic predators of the California red-legged frog in Stevens Creek, the number of red-legged frog individuals that may occur in the study area is expected to be very low.

Western pond turtle (*Actinemys marmorata*). Federal Listing Status: None; State Listing Status: Species of Special Concern.

The western pond turtle occurs in ponds, streams, and other wetland habitats in the Pacific slope drainages of California and northern Baja California, Mexico. Ponds or slack-water pools with suitable basking sites (such as logs) are an important habitat component for this species, and western pond turtles do not occur commonly along high-gradient streams. Females lay eggs in upland habitats, in clay or silty soils in unshaded (often south-facing) areas up to 0.25 mile from aquatic habitat. Nesting habitat is typically found within 600 feet of aquatic habitat, but if no suitable nesting habitat can be found close by, adults may travel overland considerable distances to nest.

In the study area, Stevens Creek provides suitable aquatic habitat for the western pond turtle, and in 2004 a western pond turtle was observed by *Thomas Reid Associates* at McClellan Ranch Preserve 0.6 mile downstream from the project site. However, no pond turtles were found by *Thomas Reid Associates* during five focused day and night surveys conducted on Stevens Creek in 2004 and 2005 just downstream of the project site (on the one-mile stretch between Stevens Creek Boulevard and

McClellan Road)[17]. Therefore, although western pond turtles may occasionally be present in the reach of Stevens Creek within the study area, they are expected to occur here infrequently and in small numbers. Western pond turtles are not expected to nest within the upland habitats on the Residential Parcel, as they are too shaded by vegetation or lack the clay and silty soils where this species typically nests.

White-tailed kite (*Elanus leucurus*). Federal Listing Status: None; State Listing Status: Fully Protected.

White-tailed kites are fairly common residents in less developed portions of the Santa Clara Valley and the surrounding foothills where extensive open grassland, ruderal, or agricultural habitats are present. White-tailed kites are known to nest in the Santa Cruz Mountain foothills in the northwest portion of Santa Clara County. A pair of white-tailed kites regularly nest along Stevens Creek on the Blackberry Farm Golf Course or Blackberry Farm Park, approximately one mile to the northeast of the Residential parcel. Suitable breeding and foraging habitat for white-tailed kites is present in the study area; however, a careful inspection of potentially suitable nesting habitat revealed no evidence of white-tailed kite nests. Therefore, although this species may forage on the Residential parcel, there is no evidence to suggest that the species currently nests on the Residential parcel. However this species could occur within the study area and is known to breed downstream nearby at Blackberry Farm.

Yellow warbler (*Setophaga petechia*). Federal Listing Status: None; State Listing Status: Species of Special Concern (Nesting).

The yellow warbler is a widespread Neotropical migrant that inhabits wet deciduous forests throughout North America. Their range has remained relatively stable over time, but populations have declined substantially in many localities due to habitat loss and expansion of the brood-parasitic brown-headed cowbird. As a result, breeding yellow warblers have been largely extirpated from the Santa Clara Valley. Ideal breeding habitat for yellow warblers consists of riparian corridors with dense, shrubby understory and open canopy.

Yellow warblers have been documented breeding in close proximity to the project site along Stevens Creek below the reservoir in Stevens Creek County Park and McClellan Ranch Preserve. The canopy of the riparian forest in the study area is more closed than is typically preferred by yellow warblers, but the habitat is suitable. Therefore, the species could nest in the riparian forest of the study area.

Pallid bat (*Antrozous pallidus*). Federal Listing Status: None; State Listing Status: Species of Special Concern.

Pallid bats are most commonly found in oak savannah and in open dry habitats with rocky areas, trees, buildings, or bridge structures that are used for roosting. Pallid bats were likely present throughout the Santa Clara Valley historically, but they are slowly being extirpated from the area due

[17] In spring 2009, City Naturalist Barbara Banfield confirmed a Western pond turtle at McClellan Ranch Preserve near the creek.

to anthropogenic disturbance and habitat loss. Pallid bats have been known to occur approximately 2.5 mile to the south of the study area near the southern end of the Stevens Creek County Park, but no maternity colonies are known to occur within or near the study area. Small numbers of pallid bats may roost in crevices or under exfoliating bark in trees within the study area; however, the absence of large trees with cavities precludes the presence of a large colonial roost or maternity colony (as opposed to solitary females with young) within the study area.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Federal Listing Status: None; State Listing Status: Species of Special Concern.

The San Francisco dusky-footed woodrat is a small mammal native to the mountain ranges of the San Francisco Bay area. This species occurs in a variety of woodland, forest, and scrub habitats that afford good cover from aerial and ground predators. Typical dominant plants within woodrat habitat include oaks, poison oak, willows, and coyote brush. Within these habitats, they forage on a variety of food items (e.g., berries, fungi, leaves, flowers, nuts). San Francisco dusky-footed woodrats tend to live in semi-colonial groups and construct large houses, up to three feet or more in diameter, made of piled sticks and sometimes leaves. Nests are often placed on the ground among trees, roots, and fallen branches, but they are also occasionally constructed in the tree canopy. A focused survey for woodrat nests was conducted during the reconnaissance survey of the study area on December 31, 2013. Three woodrat nests were detected in the coastal live oak and eucalyptus woodland, coyote brush scrub, and mixed riparian forest habitats within the Residential parcel. Woodrats may occasionally disperse through other portions of the site, but they are primarily expected to confine their activities to these habitats, which offer suitable cover for the species.

4.4.1.3 *Sensitive Habitats*

The California Department of Fish and Wildlife (CDFW) ranks certain rare or threatened plant communities, such as wetlands, meadows, and riparian forest and scrub, as 'threatened' or 'very threatened'. These communities are tracked in the CNDDB. Impacts on CDFW sensitive plant communities, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under the California Environmental Quality Act (CEQA) (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Furthermore, aquatic, wetland and riparian habitats are also afforded protection under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the U.S. Fish and Wildlife Service (USFWS).

CDFW Sensitive Habitats

Based on a query of Rarefind (CNDDB 2014) for sensitive habitats in the Cupertino, California 7.5-minute USGS quadrangle, no sensitive habitats were identified within the Residential parcel. The riparian corridor along Stevens Creek on the Corridor parcel (adjacent to the Residential parcel), however, are considered jurisdictional riparian habitat by the CDFW and a sensitive natural community under CEQA. Seasonal wetlands on the old quarry site may also be considered a sensitive community.

4.4.1.4 *Regulatory Setting*

Special-Status Species

Threatened and Endangered Species

State and federal "endangered species" legislation has provided the CDFW and the USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations.

Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3).

As discussed previously, federally Threatened Central California Coast steelhead likely occur in the project vicinity in Stevens Creek, although not on the Residential parcel. Federally Threatened California red-legged frog have been reported in the project vicinity, although are unlikely to be found on the Residential parcel.

Migratory Birds

State and federal laws also protect most bird species. The Federal Migratory Bird Treaty Act prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

Birds of Prey

Birds of prey, such as owls and hawks, are protected in California under provisions of the State Fish and Game Code. The code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

Waters of the U.S./State

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

Stevens Creek, two ephemeral streams within the Residential and Corridor parcels, and seasonal wetlands on the old quarry site are likely to be considered waters of the U.S. under the Clean Water Act and waters of the State under the Porter-Cologne Water Quality Control Act.

Clean Water Act/Porter-Cologne Water Quality Control Act

The Environmental Protection Agency's (EPA) regulations, as called for under Section 402 of the federal Clean Water Act, also include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by water quality control boards and are designed to control pollutants in sensitive aquatic habitats. Applicable NPDES permits include the State Water Resources Control Board Construction General Permit and the Municipal Regional Permit of the City of Cupertino implemented with the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (SCV Habitat Plan), which encompasses a study area of 519,506 acres (or approximately 62 percent of Santa Clara County), was adopted by six local entities in Santa Clara County. The plan went into effect in October 2013 and the newly created Santa Clara Valley Habitat Agency is charged with implementing the plan. The area for which development activities are covered by the plan is located south and east of Cupertino, primarily within the Llagas/Uvas/Pajaro, Coyote Creek, and Guadalupe Watersheds. The SCV Habitat Plan was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District, and the Santa Clara Valley Transportation Authority (collectively termed the 'Local Partners'), the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. The City of Cupertino was not a participating Local Partner and the Study Area and Permit Area for the SCV Habitat Plan does not include properties within the City boundary. Therefore, properties within Cupertino are not covered by the SCV Habitat Plan.

Three Creeks Habitat Conservation Plan (Under Preparation)

The Three Creeks Habitat Conservation Plan (Three Creeks HCP) is currently being prepared by the Santa Clara Valley Water District (SCVWD).[18] The planning area of the Three Creeks HCP encompasses Santa Clara Valley's Coyote Creek, Guadalupe River and Stevens Creek watersheds below SCVWD reservoirs.

The purpose of the Three Creeks HCP is to identify measures that will minimize and mitigate the effects of SCVWD water supply activities on anadromous fish species[19] and their habitats in north Santa Clara County streams. Covered species include Central California coastal steelhead and

[18] Santa Clara Valley Water District. "Scope of the Three Creeks HCP". Accessed June 16, 2014. Available at: <http://www.valleywater.org/EkContent.aspx?id=10748&terms=lexington>.
[19] Anadromous fish spawn in freshwater, migrate to the ocean to grow, then return to freshwater to spawn.

Central Valley fall-run Chinook salmon. Conservation measures anticipated under the Three Creeks HCP include channel and riparian rehabilitation, barrier removal, modifications to reservoir release regimes, and monitoring and adaptive management. Flow management of reservoir releases included in the Three Creeks HCP were developed based upon information gathered as a part of the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE).[20]

In the project area, the 29-square mile Stevens Creek watershed is one of the Lower Peninsula watersheds and the Three Creeks HCP will address water supply activities and covered species in Stevens Creek and Stevens Creek Reservoir. FAHCE identified a zone below Stevens Creek Dam as a Cold Water Management Zone where in-stream flow regimes and reservoir releases could be managed to meet the needs of steelhead trout. This zone occurs adjacent to the Residential parcel.

Trees

The City of Cupertino recognizes the substantial economic, environmental, and aesthetic importance of its tree population. The City finds that the preservation of specimen and heritage trees on private and public property, and the protection of all trees during construction, is necessary for the best interests of the City and of the citizens and public (Municipal Code Chapter 14.18).

The City's Municipal Code calls for protection of "specimen" and "heritage" trees and requires a permit prior to their removal. Specimen trees include the following species that have a minimum single-trunk diameter of 10-inches (31-inches in circumference) or minimum multi-trunk diameter of 20-inches (63-inches in circumference) measured at 4.5 feet from natural grade: oak (including coast live oak, valley oak, black oak, blue oak, and interior live oak), California buckeye, big leaf maple, deodar cedar, blue atlas cedar, bay laurel or California bay, and western sycamore (Municipal Code Chapter 14.18.050). Heritage Trees are any tree or grove of trees which, because of factors including, but not limited to, its historic value, unique quality, girth, height, or species, has been found by the City to have a special significance to the community.

The removal of specimen trees, heritage trees, and any tree required to be planted or retained as part of an approved development application, building permit, tree removal permit or code enforcement action shall not be removed without first obtaining a tree removal permit (Municipal Code Chapter 14.18.140). In addition, protected trees and other trees/plantings required to be retained are to be protected during demolition, grading and construction operations through the application of standards in the Municipal Code (Chapter 14.18.210). Street trees are regulated separately from trees on private property and removal or trimming of street trees except by the City's Right of Way Supervisor or their designee is prohibited (Municipal Code Chapter 14.12.080). Of the 319 trees surveyed, there are 173 protected specimens on and around the Residential parcel including one street tree along the project frontage.

[20] FAHCE is comprised of the SCVWD, California Department of Fish and Wildlife, National Oceanic & Atmospheric Administration (NOAA) Fisheries, U.S. Fish and Wildlife Service, Guadalupe-Coyote Resource Conservation District, Santa Clara Valley Audubon Society, and the City of San José. FAHCE completed studies and assessments that are being used to assist preparation of measures in the Three Creeks HCP.

A tree survey was completed for the 8.5-acre Residential parcel by *HortScience, Inc.* and reviewed by the City Arborist (Appendix D).[21] Approximately three hundred nineteen (319) trees are located on and immediately adjacent to the Residential parcel within the grading limits of the proposed residences. The most frequently occurring tree (about 80 percent of the total) was coast live oak (254 trees). Blue gum eucalyptus trees (18 total) were found along the edge of the existing road on the parcel. Other trees include 13 California black walnuts, remnants of an orchard and mostly in decline in terms of condition, olive, almond, two deodar cedar, Monterey pine, five California bay, and 11 valley oaks. The valley oaks are intermixed with the coast live oaks on the site. The surveyed coast live oak, valley oak, California bay and deodar cedar over 10 inches in diameter are considered protected trees in the City of Cupertino.

4.4.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
6. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐	1, 22
7. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐	1, 22
8. 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?	☐	☐	☒	☐	1, 22
9. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☒	☐	1, 22
10. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	1,9,22

[21] HortScience, Inc. Revised Arborist Report Parkside Trails Cupertino, CA. April 2014.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
11. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1

4.4.3 Discussion of Impacts

The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. The limits of disturbance for construction grading and road, retaining wall, and building construction on the Residential parcel are shown on Figure 4.4-1 and the alignment of the offsite sidewalk extension being considered as part of the Development Agreement is shown on Figure 2.2-3. The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict the use of these parcels to open space. The proposed project also includes several offsite components, including land dedications, trail and parking lot easements, and land trades. The offsite land dedications and trail and parking lot easements could allow for future trail and parking lot construction. Because the specific areas of disturbance for these facilities are not known at this time, subsequent environmental review will be required prior to their development to confirm the extent of possible environmental effects.[22]

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. For this reason, the last threshold listed above is not discussed further related to the direct impacts of the project.

4.4.3.1 *Impacts to Upland Habitats*

Residential Parcel

Project construction activities on the Residential parcel would result in the loss or conversion of up to 7.77 acre of coastal live oak woodland, coyote brush scrub, eucalyptus woodland, and ruderal/non-native grassland habitats (refer to Figure 4.4-1). Impacts on these habitats during construction will reduce their extent on the project site and will result in a reduction in abundance of some of the common plant and wildlife species that use the site. These habitat types are relatively abundant and

[22] The Parkside Trails Feasibility Study, included in Appendix A, is designed to provide basic information to decision makers and the public as part of an initial scoping and planning process. As noted throughout this Initial Study, while the proposed Development Agreement includes provisions for the granting of trail easements through irrevocable offers of dedication, the exact location of trail alignments and corresponding easements are not known at this time.

widespread regionally, and none of the four habitats listed in this section represent particularly sensitive, valuable (from the perspective of providing important plant or wildlife habitat), or exemplary occurrences of these habitat types. Although oak woodland is often considered a sensitive community, the coastal live oak woodland present on site is already highly disturbed and is not in a natural state. Historic aerial photographs show that the majority of the study area was cleared of its original native vegetation sometime prior to 1948, and few trees occur on site as late as 1991. The coastal live oak woodland thus consists entirely of secondary growth volunteer trees. Additionally, the soil has been heavily compacted and the understory is dominated by non-native and ruderal species. Therefore, impacts on these habitats, and the loss of potential nesting, roosting, and foraging opportunities associated with such habitats, are not considered significant. Because the number of individuals of any species that could be disturbed is very small, the project's impacts would not substantially reduce regional populations of these species. **(Less Than Significant Impact)**

Remainder of 42.4-acre Site and
Offsite Dedications, Easements, and Land Trades

Under the proposed project, the remainder of the 42.4 project site would be designated for open space and park uses. The offsite land dedications and trail and parking lot easements could allow for the future construction of trails and a parking lot to accommodate up to 12 parking spaces. The final locations and number of trail easements both on and offsite, and exact configuration of the parking lot, are not known at this time. Although, it is anticipated that there could be several trail easements that traverse the project site to connect McClellan Park Ranch Preserve to Linda Vista Park and Linda Vista Park to Stevens Creek County Park and Fremont Older Open Space Preserve. The parking lot easement would be located near the Linda Vista Drive entrance to Linda Vista Park. Some of the area is disturbed by previous quarrying activity and informal trails. The construction of the parking lot and trails or improvement of existing informal trails would affect upland habitats, although it is not anticipated that the effects of new trail and parking lot construction would substantially reduce areas of these upland habitats in Cupertino or the region. **(Less Than Significant Impact)**

4.4.3.2 *Impacts to Riparian, Aquatic and Wetland Habitats*

Residential Parcel

Impacts to Riparian Habitat

Riparian habitat is considered a sensitive natural community by various state and federal resource agencies and the City of Cupertino (General Plan Policy 5-9). The *Guidelines & Standards for Land Use Near Streams,* prepared by the Santa Clara Valley Water Resources Protection Collaborative (2005) and adopted by the City, recommends a protective buffer be established along streams, creeks, and freshwater marshes so that these resources are not impacted by development. Implementation of the proposed residential development could result in direct loss and indirect disturbance and degradation of riparian and aquatic habitat due to encroachment into protective buffers around such habitats.

Project construction and operation would impact a relatively small area of sensitive habitat directly through the temporary disturbance of 0.02 acre of riparian habitat adjacent to Stevens Creek as a result of grading associated with construction of the bioretention basin. No aquatic or wetland habitat would be directly impacted on the Residential parcel.

Riparian habitat could also be impacted indirectly through potential disturbance of wildlife as a result of the increased lighting and noise disturbance resulting from occupation of the residences following construction. Undisturbed areas within 100 feet of Stevens Creek provide important foraging, breeding, or dispersal habitat for a number of common and special-status animal species that are present or may be present in the area. Some of the more sensitive species include the Central California Coast steelhead, western pond turtle, San Francisco dusky-footed woodrat, and yellow warbler. In addition, encroachment into the riparian area may impact aquatic habitats through deterioration of water quality, as described under *Impacts to Aquatic Habitat* below.

The proposed roadway alignment is already partially developed as an existing unmaintained dirt access road. Following construction, the entrance road for the residential development would be located a minimum of 40 feet from the riparian corridor, with residences located a minimum of 35 feet farther to the north. The road and residences would also be located approximately 20 to 30 vertical feet above the creek bed of Stevens Creek. The relatively high, steep banks of the creek are expected to partially buffer the creek and riparian corridor from the increased lighting and noise disturbance associated with occupation of residences following construction.

Development of the Residential parcel could also result in a substantial adverse effect on riparian habitat due to the spread of noxious and invasive weeds. Noxious and invasive weeds pose a threat to the natural processes of plant community succession, fire frequency, biological diversity, and species composition. Noxious weeds that could potentially invade and/or spread on and adjacent to the Residential parcel include, but are not limited to: Scotch broom, French broom, English ivy, German ivy, Algerian ivy, giant reed, pampas grass, periwinkle, and Himalayan blackberry.

Due to the ecological importance of riparian habitats and their relatively limited regional extent, however, encroachment into the buffers around these habitats both during and after construction would be a significant impact.

Impacts to Aquatic Habitat

The Residential parcel is located adjacent and drains to Stevens Creek. Therefore, project construction could have a substantial adverse effect on water quality within Stevens Creek. Hardscape in uplands can lead to a decrease in infiltration and groundwater recharge, and possible increases in anthropogenic contaminants such as petrochemicals, brake dust, herbicides, and fertilizers. During construction, activities such as grading, tree and plant removal, and other soil disturbances can increase the potential for soil erosion onsite. These construction activities could increase the amount of soils and sediments entering waterways, thereby adversely impacting riparian and wetland habitats and contributing to significant water quality impacts. In addition, increases in turbidity and sediment input may cause stress to fish, including steelhead, because of feeding difficulties or displacement, and increases in sedimentation may have adverse effects on habitat for aquatic species by filling in spaces between gravels and cobbles.

PD Impact BIO-1: Construction and occupation of residences and an access road would result in limited direct impacts to riparian habitat (0.02 acre) and possible indirect impacts to riparian habitat and aquatic habitat and water quality along Stevens Creek. **(Significant Impact)**

Mitigation Measures: The rationale for the following riparian mitigation (PD MM BIO-1.1) is that the control of weeds within 100 feet of the riparian corridor will reduce the threat of invasion of riparian habitat by noxious and invasive weeds. This area also includes the 0.02 acre encroachment area. Identified invasive species represent a threat to nearby native habitats and would continue to spread without control measures. Their removal will therefore reduce a threat to native habitats and allow for the establishment of additional native species in the riparian habitat along Stevens Creek.

As a condition of approval, the proposed project shall implement the following measures to avoid or reduce impacts to the riparian and aquatic habitat along Stevens Creek:

PD MM BIO-1.1: Mitigation for Encroachment on Sensitive Habitat and Possible Spread of Weeds. Mitigation for encroachment into approximately 0.02 acre of sensitive riparian habitat will be provided through the aggressive control of all infestations of Scotch broom, French broom, English ivy, Algerian ivy, German ivy, greater periwinkle, Italian thistle, star thistle, poison hemlock, pampas grass, giant reed, Johnson grass, smilo grass, Bermuda grass, and Himalayan/non-native blackberry.

The control of these invasive species will be conducted using appropriate methodology, including hand removal, and/or mechanical removal (mowing or weed whipping), and shall include the complete removal of all associated root systems using methods acceptable to the City. An Invasive Species Management Plan shall be developed and implemented to reduce the presence and spread of non-native, invasive plant species within the riparian corridor. The Plan will be developed prior to grading any areas on the project site. Herbicides are not authorized unless they have been proven safe for use in steelhead streams and the type and application are approved in writing by a Pest Control Advisor (PCA), and have secured City's concurrence in advance, and are applied by a Licensed Qualified Applicator (LQA). The overarching goal of this mitigation is to halt the further expansion of existing invasive species and introduction of new invasive species into sensitive habitats on or adjacent to the Residential parcel (i.e., the Residential parcel and the area between the Residential parcel and Stevens Creek live creek channel). The Invasive Species Management Plan will include, but not be limited to, the following:

- Establishing a Baseline. Prior to construction, invasive species populations within the Residential parcel and the area between the Residential parcel and Stevens Creek live creek channel will be mapped and quantified. The map and quantification will be provided to the City for review and approval.

- Preconstruction Weed Control**.** Areas identified to have weed infestations will be treated prior to ground disturbance according to weed control methods detailed below and best management practices (BMPs) within all upland areas to be graded, after review and approval of methodologies by the City.

- Weed Control Treatment Considerations. Weed control treatments will include all legally permitted herbicide, manual, and mechanical methods approved for application. The application of herbicides, if submitted and approved, will be in compliance with all state and federal laws and regulations under the prescription of a PCA, where concurrence has been provided by the City, and implemented by a Licensed Qualified Applicator. Herbicides, if approved, will not be applied during or within 72 hours of a scheduled rain event. Where manual and/or mechanical methods are used, disposal of the plant debris will take place at an appropriate offsite location. The timing of the weed control treatment will be determined for each plant species with the goal of controlling populations before they start producing seeds and/or encroach into adjacent areas from rhizomatous shoots. Consultation with a City approved wildlife biologist or plant ecologist will be required prior to weed control treatments in sensitive habitats with the intent of avoiding any adverse impacts to special-status species or sensitive habitats in the area.

- Construction Monitoring and Weed Control. Surveying and monitoring for weed infestations will occur quarterly until project grading operations are complete. Treatment of all identified weed populations will occur quarterly, at a minimum. Weeds shall be removed by the accepted methods in such a manner that the roots are removed and neighboring plants to remain are not harmed. During the initial efforts, removal shall be repeated at regular intervals as frequently as needed to all of remove the targeted weed species.

- Post Construction Mapping. Once grading ceases, invasive plant populations within all sensitive habitats to be preserved will be mapped and the aerial extent and location of invasive populations documented on a quarterly basis for a minimum of three years following grading operations.

- Additional Post Construction Weed Control. If, in any monitoring year, the size of existing populations within sensitive habitats expands by 20 percent or greater (interannual variation due to climate differences may account for as much as 10 percent annual changes) in terms of surface area from populations documented prior to construction, weed control measures will be implemented as outlined above within sensitive habitats.

- Post Construction Monitoring and Success Criteria. Further monitoring and implementation of weed control measures can be discontinued and the invasive species control considered a success if invasive species population size in sensitive areas remains relatively constant (less than 10 percent fluctuation in size based on an acreage basis) for three consecutive years of normal rainfall.

  Normal rainfall is defined as the long-term annual average plus or minus 30 percent. The average yearly precipitation in Cupertino (as listed on the City of Cupertino website) in 2014 is 23 inches; therefore the normal range is 16-30 inches. If rainfall amounts are outside of this range, monitoring and weed control measures (if needed) will restart for another three consecutive years. Monitoring would continue until the invasive species population size remains relatively constant, as defined above.

- Construction Materials Brought Onto the Site**.** During construction, all seeds and straw materials used on site will be weed-free rice straw, and all gravel and fill material will be certified weed free to the satisfaction of the City and any deviation from this will be approved by the City.

- Cleaning of Construction Equipment. During construction, vehicles and all equipment will be washed (including wheels, undercarriages, and bumpers) before and after entering the project area. Vehicles will be cleaned at existing construction yards or legally operating car washes. The project applicant will document all vehicles have been washed prior to commencing project work to the satisfaction of the City. In addition, tools such as chainsaws, hand clippers, pruners, etc., will be washed before and after entering the project work area. All washing will take place where rinse water is collected and disposed of in either a sanitary sewer or landfill, unless otherwise approved by the City. A written, daily log will be kept for all vehicle/equipment/tool washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log will be available to the City for inspection at any time and will be submitted to the City on a monthly basis.

- Sudden Oak Death. The Contractor is responsible for complying with any requirements regarding Sudden Oak Death (SOD), including any requirements from the Santa Clara Agricultural Commissioner or federal agencies regarding quarantines for plant material.

  The Contractor shall be thoroughly familiar with the provisions of 7 CFR Part 301, Phytophthora Ramorum; Quarantine and Regulations (Federal Register Vol. 67, No. 31 6827-6837, dated Thursday, February 14, 2002), hereafter referred to as the Rules and Regulations.

  The Contractor shall avoid activities that could result in a need to comply with the specified Rules and Regulations to the maximum extent practicable. In the event that a situation arises that cannot be avoided involving one or more of the quarantined species, soils or other regulated materials as defined therein, the Contractor shall implement the provisions in the specified Rules and Regulations. Furthermore, the Contractor shall contact the Santa Clara County Agriculture Commissioner (SCCAC) for additional information and direction.

  The Engineer shall be notified immediately in the event a situation arises requiring compliance with the Rules and Regulations and subsequent notification of the SCCAC. Furthermore, documentation shall be provided to the Engineer enumerating the steps taken to comply.

  The Contractor shall follow precautionary measures to help limit the inadvertent spread of SOD disease, including but not limited to the following:

  a. Conduct operations during the dry season as much as possible and in a manner that will minimize and prevent wet soil, mud and plant material adhering to vehicles, equipment, and boots; utilize paved and rocked roads and landings to the extent possible.
  b. Inspect material and equipment arriving at the site from areas where SOD exists before it enters the site to ensure that no host material (soil or attached pieces of plants) is being transported into the site.

c. Completely clean all mud, dirt and soil from shoes, boots, vehicles and equipment that were used on any site within a SOD zone, to remove soil and any imbedded host plant material, prior to bringing such items to the work site.
d. Equipment coming from potentially SOD-infested sites must be completely cleaned of soil and plant material at that site and inspected carefully to ensure potential SOD-containing soil, or parts of plants, is not transported to the project site.
e. All plants and all soil material that is brought to the site for use in the project must be from SOD-free sources and SOD-free regions, and must be able to provide appropriate documentation or certification unless otherwise acceptable to the Engineer.
f. If Contractor equipment or forces have worked in a SOD zone:

- Prepare and use sanitation kits consisting of chlorine bleach and water (10:90 mixture of bleach:water), Clorox Cleanup (registered trademark) or Lysol (registered trademark), a scrub brush, metal scraper, or boot brush; and plastic gloves.
- Disinfect tools used in tree removal and pruning with Lysol spray, a 70% or greater solution of alcohol or a Clorox solution (1 part Clorox: 9 parts water, or Clorox Clean-up). If equipment such as a chain saw cannot be treated with disinfectants, consider running it through a non-host plant before leaving the infested site to break fee any lodged material.
- Sanitize shoes, pruning gear, and other equipment before working in the project area.
- Before leaving a SOD disease infected site, use all reasonable methods to sanitize gear and equipment. Scrape, brush, and/or hose off accumulated soil and mud from clothing, gloves, boots, and shoes. Remove mud, earth and plant debris by blowing out or power washing trucks and other equipment and vehicles. If complete on-site sanitation is not possible, finish decontaminating at a local power was facility or an isolated area in an equipment yard.
- Additional information on Sudden Oak Death may be obtained by visiting http://suddenoakdeath.cnr.berkeley.edu/html/treatment___management.html.

PD MM BIO-1.2: In conformance with the City of Cupertino's Municipal Code (Section 16.08.110 Interim Erosion and Sediment Control Plan), the project applicant shall prepare and submit an Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan to the City for review and approval to ensure the measures are acceptable and meet all applicable resource agency standards. The purpose of the Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan is to stabilize the soil, to reduce raindrop impact, to reduce the velocity of surface runoff, to prevent erosion, and ensure revegetation success. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall include specific measures that specially target any slopes which drain to the creek. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall specify the following and the location of all the measures listed in the plan shall be depicted on a site map:

- A delineation and brief description of the measures to be undertaken to retain sediment on the site, including, but not limited to, the designs and specifications or berms and sediment detention basins, and a schedule for their maintenance and upkeep;

- A delineation and brief description of the surface runoff and erosion control measures to be implemented, including, but not limited to, types and methods of applying mulches, and designs and specifications for diverters, dikes and drains, and a schedule for their maintenance and upkeep;

- A delineation and brief description of the vegetative measures to be undertaken, including, but not limited to, seeding methods, and type, location and extent of preexisting and undisturbed vegetation types, and a schedule for maintenance and upkeep.

PD MM BIO-1.3: Any contractors working within 100 feet of Stevens Creek will implement the following measures to minimize any potential construction effects on aquatic habitat and water quality:

- The Project's Stormwater Pollution Prevention Plan (SWPPP) will include specific and detailed BMPs designed to mitigate construction-related pollutants. These controls will include methods to minimize the contact of construction materials, equipment, and maintenance supplies with stormwater within the creek. Additional control measures identified in this SWPPP will mitigate the release of construction-related pollutants from the main site during the various construction phases. Multiple and concurrent BMPs may be appropriate to address the steep terrain and the creek channel which comprised designated Critical Habitat for steelhead.

- To the maximum extent practicable, all grading adjacent to the riparian habitat will occur during the dry season (15 May – 15 October). If grading is to occur during the rainy season the primary BMPs selected will focus on erosion control. End-of-pipe sediment control measures (e.g., basins and traps) will be used only as secondary measures.

- BMPs intended to reduce erosion of exposed soil into the bed and banks of the creek in the study area may include, but are not limited to soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales and sediment basins.

- No equipment will be operated in the live stream channel, nor within the jurisdiction of the U.S. Army Corps of Engineers, Department of Fish and Wildlife, SWRCB or RWQCB, unless applicant has secured permits from such agencies and adheres to all applicable conditions and requirements.

- Standard Site-specific, focused erosion control and slope stabilization measures will be required for work performed in any area where erosion could lead to sedimentation of Stevens Creek. The measures will be noted in the SWPPP and in application to the City for grading and building permits.

- Sturdy Silt fencing that meets Caltrans standards will be installed between any activities conducted within 100 feet of the top-of-bank and the edge of the creek to prevent dirt or other materials from entering the channel.

- No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material will be allowed to enter into or be placed where it may be washed by rainfall or runoff into aquatic habitat.

- Machinery will be refueled at least 60 feet from any aquatic habitat, and a spill prevention and response plan will be prepared and submitted to City for approval prior to issuance of any permits and its elements will be implemented.

- Absorbent materials designated for spill containment and clean-up activities will be available onsite for use in an accidental spill.

PD MM BIO-1.4: The following measures for onsite hazardous material management shall be implemented:

- An inventory of all hazardous materials used (and/or expected to be used) at the site and the end products that are produced (and/or expected to be produced) after their use will be maintained by the construction site manager.

- As appropriate, containers will be properly labeled with a "Hazardous Waste" label and hazardous waste will be properly recycled or disposed of off-site.

- Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage.

- Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110% of the primary container(s).

- Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system.

- All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water.

- Sanitation facilities (e.g., portable toilets) will be placed outside of the creek channel and floodplain. Direct connections with soil, the storm drainage system, and surface waters will be avoided.

- Sanitation facilities will be regularly cleaned and/or replaced and inspected daily for leaks and spills

PD MM BIO-1.5: The following measure for existing hazardous materials, if encountered during construction, shall be implemented:

- If hazardous materials, such as oil, batteries or paint cans, are encountered, the construction site manager will carefully remove and dispose of them according to applicable regulatory requirements.

PD MM BIO-1.6: The following measures for spill prevention and spill response shall be implemented:

Spill Prevention

- The construction site manager will prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels following these measures:

    - All construction personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills.
    - Equipment and materials for cleanup of spills will be available on site and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements.
    - The construction site manager will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means.
    - Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations). All construction personnel will be advised of these locations.
    - The construction site manager will routinely inspect the worksite to verify that spill prevention and response measures are properly implemented and maintained.

Spill Response Measures

- For small spills on impervious surfaces, absorbent materials will be used to remove the spill, rather than hosing it down with water. Absorbent materials will be collected and disposed of properly and promptly.

- For small spills on pervious surfaces such as soil, the spill will be excavated and properly disposed rather than burying it.

- If a hazardous materials spill occurs that cannot be contained or cleaned up with the onsite materials, the construction site manager will be responsible for immediately initiating an emergency response sequence by notifying the proper authorities (i.e., Santa Clara County Fire Department) of the release; taking appropriate defensive steps from a safe distance to secure the site to minimize damage to people, environment, and property (PEP); and deferring all other response activities to public emergency response agencies.

- If a "reportable" spill of petroleum products occurs, the Santa Clara County Fire Department will be notified. A reportable spill is defined as when:

    - a film or sheen on, or discoloration of, the water surface or adjoining bank is observed; or
    - a sludge or emulsion is deposited beneath the surface of the water or adjoining banks (40
    - Code of Federal Regulations 110); or
    - when another violation of water quality standards is observed.

- A written description of the reportable release must be submitted to the appropriate Regional Water Quality Control Board and the California Department of Toxic Substances Control (DTSC). This submittal must contain a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases.

- If an appreciable spill has occurred, and results determine that project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed to the specifications of DTSC to identify the likely cause of contamination. This analysis will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the construction site manager will select and implement measures to control contamination, with a performance standard that surface and groundwater quality will be returned to baseline conditions. These measures will be subject to approval by the District, DTSC, and the Regional Water Quality Control Board.

PD MM BIO-1.7: The following vehicle and equipment maintenance measures shall be implemented:

- All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented.

- Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use on the site.

- Incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) will be checked for leaking oil and fluids. Vehicles or equipment visibly leaking operational fluids will not be allowed onsite.

- No equipment servicing will be done onsite.

- If emergency onsite repairs are required in the field, only those repairs necessary to move equipment to a more secure location, and that can be performed without releasing any material into the environment will be performed.

PD MM BIO-1.8: The following vehicle cleaning measures shall be implemented:

- Equipment will be cleaned of any visible sediment or vegetation clumps before use onsite to avoid spreading pathogens or exotic/invasive species.

- Vehicle and equipment washing can occur on-site only as needed to prevent the spread of sediment, pathogens or exotic/invasive species. No runoff from vehicle or equipment washing is allowed to enter the creek.

PD MM BIO-1.9: The following vehicle and equipment fueling measures shall be implemented:

- Vehicles and equipment will be refueled at least 60 feet from any aquatic habitat.

- For stationary equipment that must be fueled on-site, secondary containment, such as a drain pan or drop cloth, will be used to prevent accidental spills of fuels from reaching the soil, surface water, or the storm drain system.

PD MM BIO-1.10: A qualified monitor for water quality will make regular site inspections to ensure that all erosion control and hazardous material use measures listed in mitigation measures PD MM BIO 1.2 through PD MM BIO 1.9 are implemented throughout the duration of onsite construction activities.

PD MM BIO-1.11: Lighting on the Residential parcel shall be designed, installed, and maintained to avoid spillover onto the adjacent Stevens Creek riparian area. All lighting shall be shown on plans submitted to City for approval. Installation of additional exterior lighting directed towards the Stevens Creek riparian area or that otherwise increases light levels (e.g., unshielded or not properly shielded lighting) in the riparian area shall be prohibited in the covenants of the Homeowner's Association for the Residential parcel.

Remainder of 42.4-acre Site and
Offsite Dedications, Easements, and Land Trades

Under the proposed project, the Corridor and Park parcels would be designated for open space and park uses. The offsite land dedications and trail and parking lot easements could allow for the future construction of trails and a parking lot to accommodate up to 12 parking spaces. The final locations and number of trail easements both on and offsite, and exact configuration of the parking lot, are not known at this time. Although it is anticipated that there could be several easements that traverse the project site to connect McClellan Ranch Preserve to Linda Vista Park and Linda Vista Park to Stevens Creek County Park and Fremont Older Open Space Preserve. It is currently anticipated that the parking lot easement would be located near the Linda Vista Drive entrance to Linda Vista Park. Crossings of riparian, aquatic or wetland habitat could be required for the development of these facilities. In addition, construction activities could facilitate the spread of invasive weed species already present in the project area.

DA Impact BIO-2: Future trail construction on the Corridor or Park parcels and offsite trail and parking lot easements could result in direct and indirect impacts to sensitive riparian, aquatic and/or wetland habitats. **(Significant Impact)**

Mitigation Measures:

DA Program Mitigation and Avoidance Measures. Various regulatory programs require the identification of sensitive wetland and riparian habitats and implementation of avoidance and mitigation measures to off-set project impacts. Existing state and federal regulations that would reduce or avoid possible impacts to aquatic, riparian and wetland habitats associated with new trail construction include:

- Clean Water Act, including Sections 401, 404 (USACE Permit program)
- Porter-Cologne Water Quality Control Act
- NPDES Municipal Regional Permit Program
- California Fish and Game Code

The City will be required to comply with all requirements of these laws, and to obtain all necessary permits, prior to constructing trails or a parking lot. In addition, various policies in the City's General Plan and regulations in the City's Municipal Code have been adopted for the purpose of avoiding or mitigating impacts to special areas of natural vegetation and wildlife habitation and water quality. Future trail and parking lot construction would be subject to the development policies listed in the City's General Plan, including the following:

Policy 5-9 – **Development Near Sensitive Areas**. Encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New development in these areas must have a harmonious landscaping plans approved prior to development.

Policy 5-10 – **Landscaping Near Natural Vegetation.** Emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain.

Policy 5-11- Natural Area Protection. Preserve and enhance the existing natural vegetation, landscape features, and open space when new development is proposed.

Policy 5-19: Natural Water Bodies and Drainage Systems. Require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

Policy 5-20: Reduction of Impervious Surfaces. Minimize storm water flow and erosion impacts resulting from development.

Policy 5-21: Pollution and Flow Impacts. Prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts.

> **Strategy. Best Management Practices.** Require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows.

The following measures will be included in the Development Agreement to avoid or reduce impacts to riparian, aquatic or wetland habitats associated with possible future trail and parking lot construction or reconstruction:

DA MM BIO-2.1: Habitat Survey, including Wetland Determination.
Prior to City approval of any final designs for trail or parking lot construction, surveys for sensitive habitats shall be conducted. Based on these surveys, the City shall adjust the design of the trails and/or parking lot and otherwise incorporate features to minimize direct and indirect impacts to riparian, aquatic, or wetland habitats to the greatest extent feasible. A jurisdictional delineation of wetlands regulated under Section 404 of the Clean Water Act and mapping of riparian corridors subject to regulation under the California Fish and Game Code shall be used to determine the best design for trail alignments or structures to cross sensitive habitat areas where avoidance is infeasible and to provide adequate area for onsite mitigation, if needed.

DA MM BIO-2.2: Habitat Mitigation and Monitoring Plan (HMMP). Potential impacts within sensitive riparian or seasonal wetland habitats include both temporary and permanent impacts. Replacement ratios for mitigation of impacts to sensitive riparian or seasonal wetland habitat shall be identified in a site-specific habitat mitigation and monitoring plan, based upon the results of surveys for sensitive habitats (DA MM BIO-2.1, above). Temporary and permanent impacts to seasonal wetlands on the project site shall be replaced at a minimum replacement-to-loss ratio of 1:1 (one acre of wetland created for each acre filled) and impacts to riparian habitat shall be replaced at a minimum replacement-to-loss ratio of 2:1 in accordance with a riparian and/or seasonal wetland mitigation plan. Compensation would occur either pursuant to a site-specific mitigation plan (onsite or in close proximity) or through the purchase of mitigation credits from a local wetland mitigation bank or program for the creation of wetlands in the region (e.g., a mitigation bank whose service area includes the project site). An open space or conservation easement, or other similar instrument, shall be recorded on property associated with mitigation lands to protect the created wetlands or riparian resources in perpetuity. The HMMP shall be prepared by a qualified restoration ecologist and will provide, at a minimum, the following components:

- Summary of habitat impacts and proposed habitat mitigation actions.
- Goals of any restoration to achieve no net loss.
- The location of mitigation sites and existing site conditions.
- Mitigation design, including:
  - Construction schedule.
  - Description of existing and proposed soils, hydrology geomorphology and geotechnical stability.
  - Site preparation and grading plan.

  - Invasive species eradication plan, if applicable.
  - Soil amendments and other site preparation.
  - Planting plan (plant procurement/propagation/installation).
  - Maintenance plan.
- Monitoring measures, performance and success criteria.
- Monitoring methods, duration, and schedule.
- Contingency measures and remedial actions.
- Reporting measures.

A draft HMMP shall be prepared and approved in concept by the Cupertino City Council, prior to approval of the final design for trail and/or parking lot construction.

The HMMP shall be reviewed and approved by regulatory and responsible agencies, such as the U.S. Army Corps of Engineers, California Department of Fish and Wildlife and California Regional Water Quality Control Board, as appropriate. Mitigation shall be deemed complete when the final success criteria have been met as determined by applicable regulatory/responsible agencies.

DA MM BIO-2.3: Avoidance, Protection, and Riparian Tree Replacement Measures.

- Possible impacts to riparian or seasonal wetland habitats shall be avoided to the greatest extent feasible by using free span bridges or boardwalks where trail crossings over these habitats cannot feasibly be avoided.

- Prior to the start of construction activities within or near seasonal wetlands or riparian habitat, the limits of the construction zone will be clearly marked and fenced (under the supervision of a qualified biologist and/or qualified ecological monitor) to protect vegetation outside of the established construction zone. An ecological monitor will make regular site inspections to ensure that the fence remains in place and that construction activities are confined to the delineated impact areas. All environmentally sensitive areas will be designated on project plans. In this way, sensitive areas will be protected from construction disturbance and trampling.

- The amount of riparian vegetation trimmed, removed, or disturbed shall be minimized. Native trees (more than 6 inches in diameter at breast height (DBH) that are removed in riparian areas shall be replaced at a 3:1 ratio onsite (to the extent feasible) or within the same watershed (Stevens Creek) using local, native riparian trees. Any revegetation efforts shall be completed prior to the rainy season. The plantings shall be maintained until successfully established.

- Construction of any new crossings of Stevens Creek shall be completed between May 15 and October 15.

DA MM BIO-2.4: Weed Control Measures.

To avoid the introduction of invasive species into the project area during trail construction, contract specification shall include (at a minimum) the following measures:

- All earthmoving equipment to be used during project construction shall be thoroughly cleaned before arriving on the project site.

- All seeding equipment (e.g., hydroseed trucks), if used on the site, shall be thoroughly rinsed at least three times prior to arriving at the project site and beginning seeding work.

- To avoid spreading any non-native invasive species already existing onsite to offsite areas, all equipment shall be thoroughly cleaned before leaving the site.

DA MM BIO-2.5: All contractors working within 100 feet of Stevens Creek will implement the following measures to minimize potential construction effects on aquatic habitat and water quality:

- A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared that includes specific and detailed BMPs designed to mitigate construction-related pollutants. These BMPs will include methods to minimize the contact of construction materials, equipment, and maintenance supplies with stormwater. The BMPs identified in the SWPPP will also mitigate the release of construction-related pollutants from the trail corridor(s) during the various construction phases.

- To the maximum extent practicable, all grading and ground disturbance adjacent to the riparian habitat will occur during the dry season (15 May – 15 October). If grading is to occur during the rainy season, the primary BMPs selected will focus on erosion control.

- BMPs intended to reduce erosion of exposed soil into the bed and banks of the creek in the area may include, but are not limited to, soil stabilization controls, watering for dust control, perimeter silt fences, placement of fiber rolls and sediment basins.

- No equipment will operate in the live stream channel.

- Standard erosion control and slope stabilization measures will be required for work performed in areas where erosion could lead to sedimentation of Stevens Creek.

- Silt fencing and/or fiber rolls will be installed between activities conducted within 100 feet of the top-of-bank to prevent dirt or other materials from entering the channel.

- No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material will be allowed to enter into or be placed where it may be washed by rainfall or runoff into aquatic habitat.

- Machinery will be refueled at least 60 feet from any aquatic habitat, and a spill prevention and response plan will be implemented.

- Absorbent materials designated for spill containment and clean-up activities will be available on site for use in an accidental spill.

Trail construction could affect sensitive natural communities and wildlife habitat, especially riparian, aquatic and/or wetland habitats. Implementation of the identified mitigation and avoidance measures (e.g., General Plan policies and existing regulations) and mitigation measures included in the Development Agreement would limit or preclude possible impacts to these sensitive habitats from future trail construction. **(Less Than Significant Impact with Mitigation)**

4.4.3.4 *Impacts to Special-Status Species*

Impacts on Special-status Plants

Residential Parcel

Based upon a review of available information and a site visit, special-status plant species have been determined to be absent from the Residential parcel based on a lack of suitable habitat. Implementation of the project, therefore, would not impact special-status plants. **(No Impact)**

Remainder of 42.4-acre Site and Offsite Dedications, Easements, and Land Trades

Under the proposed project, the remainder of the project site (Corridor and Park parcels) would be designated for open space and park uses. Habitats on the Corridor and Park parcels and the old quarry area are similar to the Residential parcel, with the exception of chaparral, seasonal wetland, and aquatic habitats. Habitats for a number of special-status plant species known in the project vicinity, such as those found on serpentine substrates, are not present in these areas. Several species, such as arcuate bush-mallow and Santa Clara red ribbons have not been reported on the site, but could potentially be found in chaparral or openings in woodland areas. In addition, Western leatherwood (*Dirca occidentalis*) has been reported to occur in neighboring Stevens Creek County Park.[23] Much of the area is disturbed by previous quarrying activity as well as existing, informal footpaths, which limits the likelihood that special-status plants would be encountered along a future trail alignment or parking lot, however.

DA Impact BIO-3: Given the existing habitats and existing level of disturbance on the Corridor and Park parcels and areas of the proposed offsite dedications, easements, and land trades, it is not anticipated that the effects of new trail and parking lot construction would substantially reduce populations of special-status plants in Cupertino or the region. However, localized populations of special-status species may be present along a particular easement, in which case trail construction could potentially cause a significant impact to those species. **(Significant Impact)**

[23] Calflora. "Taxon Report *Dirca occidentalis*". Accessed May 20, 2014. Available at: <http://www.calflora.org/entry/observ.html#search=t&lpcli=t&taxon=Dirca+occidentalis&cch=t&inat=r&cc=SCL>

Mitigation Measures:

DA Program Mitigation and Avoidance Measures. Various policies in the City's General Plan and regulations in the City's Municipal Code have been adopted for the purpose of avoiding or mitigating impacts to natural vegetation and wildlife habitation. In addition, federal and state law govern impacts to certain protected plant species. Future trail construction would be subject to the federal and state laws and development policies listed in the City's General Plan, including the following:

Policy 5-9 – Development Near Sensitive Areas. Encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New development in these areas must have a harmonious landscaping plans approved prior to development.

Policy 5-10 – Landscaping Near Natural Vegetation. Emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain.

Policy 5-11- Natural Area Protection. Preserve and enhance the existing natural vegetation, landscape features, and open space when new development is proposed.

- Federal Endangered Species Act
- California Endangered Species Act

The following measures are included in the Development Agreement to avoid or reduce impacts to special-status plants resulting from future trail construction or reconstruction.

DA MM BIO-3.1: Special-Status Plant Surveys. Biological surveys for special-status plant species, as defined in Public Resources Code Section 15380, shall be conducted as a part of trail planning to assist with trail placement and design. At a minimum, potential habitat and impacts should be assessed for the local special-status species arcuate bush-mallow, Santa Clara red ribbons, and Western leatherwood during appropriate flowering season surveys.

Development of trails through areas that support special-status plant species shall be avoided through trail design and modifications of trail easements to the extent feasible from an engineering and cost perspective and when selecting another route would not cause other significant impacts (such as impacts to seasonal wetlands). Trail construction shall be undertaken so there are no significant impacts to special status plant species.

Trail construction could affect individual special-status plants if populations are present along a particular trail alignment. Implementation of the identified program mitigation and avoidance measures (e.g., General Plan policies, existing regulations, and measures to be included in the Development Agreement) at the time a future trail project is considered would limit or preclude impacts to these local special-status plant species. **(Less Than Significant Impact with Mitigation)**

Impacts on Special-Status Animals

Residential Parcels

Development of the proposed residences may also include extension of the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel (refer to Figure 2.2-3), which is being considered as part of the project Development Agreement. The area of the sidewalk alignment primarily supports a mixture of trees and landscaping. With the exception of habitat for nesting birds, this area does not support habitat for special-status species.

Impacts on Central Coast Steelhead

Project activities will not result in the fill or direct disturbance of aquatic habitat supporting steelhead. As previously discussed under *Impacts to Aquatic Habitat,* steelhead could be impacted by potential changes to water quality within the aquatic habitat of Stevens Creek. Aquatic habitats and wetlands control overall water quality, watershed functions, and provide habitat for plants and animals. Contamination of these habitats with pollutants and sediment can adversely affect ecosystem health and reduce habitat quality for special-status plant and animal species, including the threatened Central California Coast steelhead. The proximity of construction to Stevens Creek could potentially lead to water quality and aquatic habitat impacts.

Various project-related activities and factors could contribute to a reduction in water quality during construction and/or post construction periods. During construction, site runoff could contribute to soil erosion and cause sediment deposition downstream, and runoff from areas within active construction may be more likely to allow for undesirable erosion or carry unacceptable sediment loads. Project activities such as grading, tree and plant removal, and other soil disturbances can increase the potential for soil erosion onsite. These construction activities could increase the amount of soils and sediments entering waterways, thereby negatively impacting riparian and wetland habitats and contributing to significant water quality impacts. Increases in turbidity and sediment input may also cause stress to fish, including steelhead, because of feeding difficulties or displacement, and increases in sedimentation may have adverse effects on habitat for aquatic species by filling in spaces between gravels and cobbles.

Post-construction, hardscape in uplands, such as the roadways and paving proposed on the Residential Parcel, can lead to an increase in runoff, a decrease in infiltration and groundwater recharge, and possible increases in anthropogenic contaminants such as petrochemicals, brake dust, herbicides, and fertilizers. Under the proposed project, storm water from the Residential Parcel will be directed to bioretention-planters to filter and reduce the volume and rate of stormwater runoff from building roofs, patios and driveways and a bioretention basin is proposed in the southeast corner of the Residential Parcel to collect and filter stormwater runoff generated by the streets and driveways. These features will also to provide hydromodification control for runoff from the site to pre-project levels.

PD Impact BIO-4: Project activities could result in potentially significant impacts on aquatic habitats supporting steelhead through impacts on water quality, degradation of habitat, and impairment of health of individuals. **(Significant Impact)**

Mitigation Measures: The potential impacts to aquatic habitats occupied by steelhead would be reduced to a less-than-significant level through project design of the onsite drainage system and implementation of Standard Project Conditions for construction and post-construction water quality control in the City of Cupertino's Municipal Code Chapter 9.18, and the mitigation measures PD MM BIO-1.2 through 1.10, described previously under *Impacts to Aquatic Habitat*.

Outlines of the Standard Project Conditions for conformance with the City of Cupertino's Municipal Code Chapter 9.18 (to avoid and reduce construction and post-construction impacts to water quality and for hydromodification) are provided in Section 4.9.3.1 Hydrology and Water Quality of this Initial Study. **(Less Than Significant Impact with Mitigation)**

Impacts on the California Red-legged Frog

Suitable breeding habitat for the federally listed California red-legged frog is not found on the Residential parcel. Potentially suitable California red-legged frog breeding ponds is present approximately 0.3 mi to the northeast of the Residential parcel on the Deep Cliff Golf Course and a known breeding pond is located approximately 1.3 miles to the northwest. Because the Residential parcel is separated from these ponds by residential development, red-legged frog dispersal overland to these areas likely would be impeded. In addition, the distance between the Residential parcel and the nearest known breeding pond would reduce the number of red-legged frogs that may reach the project site from this breeding location. Further, bullfrogs and crayfish, predators of the California red-legged frog, are known to occur in Stevens Creek, the nearest aquatic habitat to the Residential parcel. For these reasons, the number of red-legged frog individuals that may occur with the proposed development area on the Residential parcel is expected to be very low.

Construction activities related to the proposed residential project would result in the temporary disturbance and permanent loss of a small amount of non-breeding habitat that could potentially be used by any red-legged frog that might disperse onto the Residential parcel. However, the habitats in the area of the Residential parcel are of low quality as there is no breeding habitat present within or immediately adjacent to the Residential parcel and there are impediments to dispersal between the surrounding area and known breeding locations, as described above. Thus, the habitats within the Residential parcel study area are not particularly important for red-legged frog populations in the region, especially given the more extensive examples of these habitat types to the northwest and south (e.g., Rancho San Antonio Open Space and County Park, Stevens Creek County Park, Fremont Older Open Space Preserve), which are in immediate proximity to known red-legged frog populations.

There is an extremely low probability of impacts on individual red-legged frogs due to the low quality of the habitat and the limited number of individuals that could possibly occur on the Residential parcel, if the species is present at all. Further, construction is anticipated to occur during the dry season when red-legged frogs, if present in the vicinity, are unlikely to move into the uplands away from Stevens Creek. Residential construction may not affect this species at all, and at most, it would have a very limited effect on a small number of individuals. The proposed residential development, therefore, would not substantially impact any red-legged frog population. Further, the habitats on the Residential parcel do not provide high-quality movement or refugial habitat, and red-

legged frog dispersal through the site will still be possible following the proposed development on the Residential parcel.

PD Impact BIO-5: Although the probability is extremely low, individual red-legged frogs could be harmed during construction of the proposed 18 residences. **(Significant Impact)**

Mitigation Measures: Although the possibility of red-legged frogs being present on the Residential parcel is extremely low, the following measures to avoid harming red-legged frogs would be implemented as a condition of project approval:

PD MM BIO-5.1: A worker awareness program shall be given by a qualified biologist before the onset of construction to explain to construction personnel how best to avoid the accidental take of red-legged frogs. The training session shall be scheduled as a mandatory informational field meeting for contractors and all construction personnel. Topics discussed during the field meeting will include species identification, life history, descriptions of habitat requirements during various life stages, habitat sensitivity, and general measures being implemented to conserve the species as they relate to the Project, penalties for non-compliance, and boundaries of the construction area.

PD MM BIO-5.2: A qualified biologist should survey the areas on and adjacent to the Residential parcel within 48 hours prior to the initiation of Project activities and shall be present at the work site until all workers have been instructed, and initial disturbance of all potential red-legged frog habitat (including potential refugia, such as debris that could shelter a frog) has been completed. If California red-legged frogs of any life stage are found, the Project proponent should cease all work in vicinity of the frog and contact the USFWS to request approval to capture and move the red-legged frog(s) to suitable habitat outside the activity area. No red-legged frogs will be moved without prior approval from USFWS, and no work that could result in harm of the red-legged frogs will occur as long as red-legged frogs are present on or adjacent to the Residential parcel.

PD MM BIO-5.3: During Project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

Potential Impacts on the Western Pond Turtle

Stevens Creek provides suitable aquatic habitat for the western pond turtle, a California species of special concern, though turtles are only expected to occur in this reach of Stevens Creek infrequently and in small numbers. Pond turtles are not expected to nest within the upland habitats of the Residential parcel and adjacent Corridor parcel as they are too shaded by vegetation or lack the clay and silty soils where this species typically nests.

The proposed project may result in the disturbance of a very small amount of riparian habitat (0.02 acre). This disturbance could result in harm to individual turtles or degradation of aquatic habitat due to erosion of sediment that is loosened during construction, if erosion and sedimentation is not controlled. Project construction, however, does not have the potential to not affect a large enough number of individuals to have a substantial effect on the regional population, and the amount and

quality of habitat for western pond turtles being impacted is very low compared with the available habitat in the vicinity. Implementation of MM BIO-1.3 above would limit degradation of aquatic habitat that could harm Western pond turtles and the project would not result in a substantial adverse impact on this species. **(Less Than Significant Impact)**

Potential Impact on the White-tailed Kite

Woodland/ruderal grassland habitat on the parcels provides foraging habitat for the white-tailed kite, a California species of special concern. Implementation of the project would result in the loss of a small amount of foraging habitat for this species. The loss of a small amount of foraging habitat for white-tailed kites is not considered significant, however, because there are expansive areas of foraging habitat of equal or higher value available regionally, and the loss of the woodland/ruderal grassland habitat present in the study area would have no substantive impact on regional populations of white-tailed kites.

While no old raptor nests were observed in the area, suitable nesting habitat for the white-tailed kite is present. Based on H.T. Harvey's site observations, the areal extent of the site, and known breeding densities of the white-tailed kite, no more than one pair of white-tailed kites would nest in or immediately adjacent to the Residential parcel. Because no more than one nesting pair could be affected, the potential project impacts would not substantially reduce regional populations of this species and do not meet the CEQA standard of having a substantial adverse effect. Moreover, compliance with federal and state laws regarding protected species (see Regulatory Overview for Nesting Birds and Standard Permit Measures to comply with the Migratory Bird Treaty Act below) will further reduce the already insignificant impacts on the white-tailed kite and its habitat. These impacts are, therefore, considered less than significant under CEQA. **(Less Than Significant Impact)**

Impacts on the Yellow Warbler

The yellow warbler, a California species of special concern, could potentially nest within the riparian habitat in the area but is not expected to be impacted significantly by the project. Based on observations by H.T. Harvey & Associates, the areal extent of the Residential and Corridor parcels, and known breeding densities of these species, no more than one pair of yellow warblers could nest within the area. If this species does nest in the area, implementation of the proposed residential development would result in the loss of nesting habitat and could result in the removal of an active nest. In addition, increased disturbance near active nests could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

However, because the number of nesting pairs that could be disturbed is very small, implementation of the residential project would not substantially reduce regional populations of this species. Moreover, compliance with federal and state laws regarding protected species (see Regulatory Overview for Nesting Birds and Standard Permit Measures to comply with the Migratory Bird Treaty Act below) will further reduce the already insignificant impacts on the yellow warbler and its habitat. Thus, these impacts do not meet the CEQA standard of having a substantial adverse effect, and would be considered less than significant under CEQA**. (Less Than Significant Impact)**

Impacts on the Western Red Bat and Pallid Bat

Two bat species designated as California species of special concern, the western red bat and pallid bat, may be present in the area of the Residential and Corridor parcels. Western red bats may occur in the area in low numbers as migrants and winter residents, and may roost in foliage in trees virtually anywhere in the area. Pallid bats may be present in the study area as occasional foragers. Neither of these species is expected to breed in the study area.

Project construction would permanently alter the extent of foraging habitats for western red bats and pallid bats in the study area. The loss or conversion of these habitats would affect only a very small proportion of regionally available foraging habitat for these species. Given the relative abundance of natural habitats in the region, disturbance to and loss of regionally common natural habitats as a result of project implementation, the impact to foraging habitat for special-status bats would be less than significant.

The absence of large trees with cavities precludes the presence of a large pallid bat colonial roost or maternity colony (as opposed to solitary females with young) within the area, and western red bats are not colonial. Tree removal could result in the loss of roosting sites for individual western red bats or pallid bats and if trees that contain individual bats are removed, modified, or exposed to increased disturbance, individual bats could be physically injured or killed, subjected to physiological stress as a result of being disturbed during torpor, or subjected to increased predation due to exposure during daylight hours. Bats are likely to flush from trees when approached by heavy equipment, however, before trees themselves are impacted, so that injury or mortality is unlikely**.** Implementation of the project, therefore, would not result in a substantial impact on local or regional populations as only individuals, not entire colonies, could potentially be affected. In addition, suitable roost sites for these species are expected to be widespread enough in the vicinity that the loss of a roost site resulting from project activities would not necessitate replacement. Therefore, impacts on the western red bat and pallid bat would be less than significant. **(Less Than Significant Impact)**

Impacts on San Francisco Dusky-footed Woodrats

Three San Francisco dusky-footed woodrat nests were observed on the Residential parcel during surveys of the area. Implementation of the project may result in the injury or mortality of dusky-footed woodrats as a result of clearing and grading, project vehicle traffic, equipment use, worker foot traffic, and landscaping activities, particularly if disturbance occurs when woodrats are taking refuge in their stick nests. Movements within individual home ranges may be affected during activities as a result of disturbance of habitat, and project-related disturbances may cause woodrats to flee their nests, exposing them to a greater risk of predation and indirect impacts resulting from individuals in disturbed habitat moving to areas already occupied by other woodrats or limits on available resources. The increase in the number of homes in the area may also result in an increase in the number of domestic cats, which prey on dusky-footed woodrats.

San Francisco dusky-footed woodrats are relatively common in suitable habitat regionally and have high reproductive capabilities. As a result, project impacts on dusky-footed woodrats would not have a substantial effect on regional populations. However, woodrats are very important ecologically in that they provide an important prey source for raptors (particularly owls) and for predatory mammals,

and their nests provide habitat for a wide variety of small mammals, reptiles, and amphibians. As a result, the loss of multiple woodrat nests may be considered a substantial adverse effect on a special-status species**.**

PD Impact BIO-6: Construction and occupation of residences and an access road would result in direct impacts to three San Francisco dusky-footed woodrat nests. **(Significant Impact)**

Mitigation Measures: As a condition of approval, the proposed project shall implement the following measures to avoid or reduce impacts to the San Francisco dusky-footed woodrats:

PD MM BIO-6.1: Pre-construction Surveys. Pre-construction surveys for woodrat nests will be conducted within the impact footprint by a qualified biologist prior to the start of work. Preconstruction surveys will be conducted no more than 30 days prior to the start of work, though earlier surveys may be conducted to identify nests within the development envelope that may need relocation during the non-breeding season of October to February. Woodrat nests detected during the survey will be mapped and one or more of the following measures will be implemented.

- Disturbance-free Buffers. A minimum 50-foot will be maintained between project construction activities and each nest to be retained on or adjacent to the site to avoid disturbance. In some situations, a smaller buffer may be allowed if in the opinion of a qualified biologist removing the nest would be a greater impact than that anticipated as a result of project activities. Safety and/or silt fencing (for nests downslope) will be erected around all nests within 25 feet of construction activity to avoid impacts during construction

- Relocation of Nest Materials. If active woodrat nests are found within the limits of disturbance and avoidance is not feasible, then the California Department of Fish and Wildlife will be contacted to secure concurrence with the following measures:

  - Woodrats will be evicted from their nests prior to the removal of the nests and onset of ground-disturbing activities to avoid injury or mortality of the woodrats. Nests shall only be moved in the early morning during the non-breeding season (October through February). A qualified biologist will disturb the woodrat nest to the degree that all woodrats leave the nest and seek refuge outside of the project activity area. Subsequently, the nest sticks will be removed from the site; if feasible, these materials will be piled at the base of a nearby tree or shrub. The spacing between relocated nests will not be less than 100 feet, unless a qualified biologist has determined that the habitat can support higher densities of nests.

  - If the nest is to be moved downslope of the development footprint, extra precautions will be taken, such as a plywood barrier to stop falling/sliding materials from impacting the new nest.

Results of the pre-construction surveys and any relocations of nest materials will be reported to the Director of Community Development Director prior to the initiation of site grading. To ensure

conditions have not changed and woodrats have not initiated new nests, a final preconstruction survey will be conducted no more than four days before the start of work.

Implementation of the measures above providing for buffers and/or relocation of nest materials would avoid or reduce impacts to San Francisco dusky-footed woodrat populations to a less than significant level. **(Less Than Significant Impact with Mitigation)**

Impacts to Nesting Bird Species
Protected Under the Migratory Bird Treaty Act

The trees on the Residential parcel and the sidewalk extension from Miramonte Road to the site that is being considered as part of the Development Agreement support potential habitat for tree nesting raptors and other birds. Tree nesting raptors, along with all migratory birds, are protected under the Migratory Bird Treaty Act. Disturbance to nests that results in nest abandonment or death would be in violation of state and federal law.

PD Impact BIO-7: Future project construction activities could disturb the nests of migratory birds. **(Significant Impact)**

Mitigation Measures: As a condition of approval, the proposed project shall implement following measures to ensure that project activities comply with the Migratory Bird Treaty Act and California Fish and Game Code [Note: Removal of vegetation over the entire site outside the nesting season may not be feasible where it would inhibit erosion control measures during the rainy season.]:

PD MM BIO-7.1: Avoidance and Inhibition of Nesting. To the extent feasible, removal of trees and/or other potential nesting substrates (e.g., bushes and other vegetation) that are scheduled to be removed by the project construction activities shall be removed between September 1 and January 31 (inclusive) to avoid the nesting season for birds and preclude the initiation of nests in vegetation.

PD MM BIO-7.2: Pre-construction/Pre-disturbance Surveys. If removal of the trees and vegetation onsite is planned to take place between January and August (inclusive), then pre-construction surveys for nesting birds shall be conducted by a qualified ornithologist no more than five days prior to the initiation of construction activities. The ornithologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 250 feet for raptors and 50-100 feet for other species), to ensure that no nests of species protected by the Migratory Bird Treaty Act and California Fish and Game Code will be disturbed during project implementation.

PD MM BIO-7.3: A report summarizing the results of the pre-construction survey and any designated buffer zones or protection measures for tree nesting birds shall be submitted to the Community Development Director, prior to the start of grading or tree removal.

Remainder of 42.4-acre Site and Offsite Dedications, Easements, and Land Trades

Special-status animal species that may reside or pass through the remainder of the project site include Central California Coast steelhead, California red-legged frog, Western pond turtle, San Francisco dusky-footed woodrat, roosting bats, and nesting raptors and yellow warbler. Direct impacts from trail and parking lot construction or indirect effects from erosion and sedimentation or the spread of invasive weeds in sensitive habitats potentially could adversely special-status animals in the area.

DA Impact BIO-8: Future trail construction on the Corridor and Park parcels and offsite trail and parking lot easements potentially could affect special-status animals or fish. **(Significant Impact)**

Mitigation Measures:

DA Program Mitigation and Avoidance Measures. Various regulatory programs require the protection of special-status animals and their habitat. Existing state and federal regulations that would reduce or avoid possible impacts to special-status animals associated with new trail construction include:

- Federal Endangered Species Act
- Federal Migratory Bird Treaty Act
- Clean Water Act, including Sections 401, 404 and NPDES Program
- California Endangered Species Act
- California Fish and Game Code (Sections 2513, 2802, 3503, 3503.5, 3800)
- Porter-Cologne Water Quality Control Act
- Public Resources Code Section 15380 (CEQA Guidelines)

The City will be required to comply with all requirements of these laws, and to obtain all necessary permits, prior to constructing any trails. In addition, various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating impacts to special areas of natural vegetation and wildlife habitation and water quality. Future trail and parking lot construction would be subject to the development policies listed in the City's General Plan, including the following:

Policy 5-9 – **Development Near Sensitive Areas**. Encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New development in these areas must have a harmonious landscaping plans approved prior to development.

Policy 5-10 – **Landscaping Near Natural Vegetation.** Emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain.

Policy 5-11- Natural Area Protection. Preserve and enhance the existing natural vegetation, landscape features, and open space when new development is proposed.

Policy 5-14 – Recreation and Wildlife Trails. Provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered or designated as species of special concern.

Policy 5-19: Natural Water Bodies and Drainage Systems. Require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

Policy 5-20: Reduction of Impervious Surfaces. Minimize storm water flow and erosion impacts resulting from development.

Policy 5-21: Pollution and Flow Impacts. Prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts.

> **Strategy. Best Management Practices.** Require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows.

In addition to the program measures identified above, the following measures are included in the Development Agreement to avoid or reduce impacts to special-status animals from future parking lot and trail construction or reconstruction.

DA MM BIO-8.1: **Special-Status Animal Surveys**. Biological surveys for selected special-status species shall be conducted prior to city approval of final trail and parking lot design to assist with trail placement and design. At minimum, potential habitat and impacts shall be assessed by qualified biologist for California red-legged frog, Western pond turtle, yellow warbler, white-tailed kite, nesting raptors, roosting bats, and San Francisco dusky-footed woodrat.

Based on these surveys, the City shall adjust the design of the trails and/or parking lot to the extent feasible. If direct and indirect impacts to habitat and individual special-status species cannot be fully avoided, consultation with the U.S. Fish and Wildlife Service (in accordance with Section 7 of the Endangered Species Act) and California Department of Fish and Wildlife (in accordance with the Fish and Game Code) would be required as necessary. At that time, appropriate mitigation and/or minimization measures will be identified and incorporated into the project as needed in order to ensure that there are no remaining significant impacts to special status animal species. If they are needed, avoidance and minimization measures shall include, but are not limited to:

- Development of a construction mitigation and monitoring plan prior to approval final design plans. The plan shall include:
  - Monitoring measures.
  - Monitoring methods and qualified monitors.
  - Preconstruction surveys and establishment of buffers for nesting birds and other species as appropriate.
  - Limiting construction activities during breeding or critical movement periods.

  - Establishing limits of construction disturbance and monitoring the placement and maintenance of fencing protecting environmentally sensitive areas.
  - Avoiding construction in seasonal wetland and riparian habitats, if feasible.
  - Reporting requirements

- The removal of trees and woody vegetation shall be limited in accordance with DA MM BIO 2-3.

DA MM BIO-8.2: Water Quality and Aquatic Habitat for Central California Coast Steelhead California Red-legged Frog, and Western Pond Turtle.

Implementation of DA MM BIO-2.2 through 2.5, in concert with the measures listed below, will reduce impacts to special-status species that utilize aquatic, riparian and seasonal wetlands habitat within or near future trails and the 12-space parking lot.

- Bio-retention features or other sediment controls for storm runoff from trails traversing the quarry site shall be identified on trail construction plans.

- Construction of any new crossings of Stevens Creek shall be completed between May 15 and October 15.

- During construction activities, locate equipment maintenance, refueling, and staging areas at least 100 feet from creek banks. Conduct refueling behind a contaminant barrier that prevents spilled or leaked fuel from entering the creek. All equipment servicing shall be conducted with designated areas with appropriate setbacks from the top of the bank. All motorized equipment used during construction shall be checked for oil, fuel, and coolant leaks prior to initiating work.

- Implement a Storm Water Pollution Prevention Plan (SWPPP) as part of a trail construction project, to ensure that sediment and contaminants from construction activities do not enter Stevens Creek or its tributary channels.

- For California red-legged frogs, implement a season work period so that construction activities in or immediately adjacent to potential California red-legged frog breeding habitat will occur between August and October to avoid the period when frogs are breeding, when eggs or larvae are most likely to be present, and when overland dispersal of California red-legged frogs is highest. Measures to avoid impacts to individual frogs shall include, but are not limited to:

  - Placement of exclusion fencing, as appropriate;
  - Preconstruction surveys by a qualified biologist within one week of construction initiation and within 48 hours of the start of construction to confirm that no individuals are present within the construction area.

- For Western pond turtles, nesting habitat shall be avoided as a part of trail design if identified during biological surveys for special-status animal species.

DA MM BIO-8.3: Construction Timing and Preconstruction Surveys for Nesting Birds. Impacts to nesting birds will be avoided by removing all potential nesting habitat (vegetation) during the non-nesting season from September 1 to March 1. If vegetation will be removed or otherwise impacted during the nesting season, pre-construction surveys will be conducted by a qualified ornithologist; if active nests are found, disturbance-free buffer zones (typically 250 feet for raptors and 50-100 feet for other birds) will be established until young birds have fledged.

Trail development through areas that support special-status animal species shall be avoided to the extent feasible through trail design and modification of trail easements or incorporation of avoidance measures (such as construction timing), as appropriate, so that there are no significant impacts to special-status animal populations.

Trail construction could directly or indirectly affect individual special-status animals, if present along a particular trail alignment. Implementation of the identified program mitigation and avoidance measures (e.g., General Plan policies, existing regulations, and measures included in the Development Agreement) at the time a future trail project is considered would limit or preclude impacts to these local special-status animal species. **(Less Than Significant Impact with Mitigation)**

4.4.3.5 *Impacts to Trees*

Residential Parcel and Adjacent Area

The tree survey completed for the residential development (refer to Appendix D) evaluated impacts to trees based on tree health and anticipated redevelopment, including grading and construction of roadways and retaining walls.[24]

The project would remove approximately 264 native and non-native trees from the site. The 264 trees proposed for removal are summarized in Table 4.4-1. Approximately 135 of the trees proposed for removal are protected under the City's tree protection ordinance, including 126 native coast live oaks, five valley oaks, one big leaf maple, one blue oak, one California bay, and one deodar cedar. The 135 protected trees proposed for removal are summarized in Table 4.4-2.

New landscape tree plantings are also proposed on each residential lot and along internal roadways (see Figure 3.2-4). According to the landscape plan prepared by *Gates + Associates* (April 11, 2014), a total of 329 new trees will be planted onsite. The City's Replacement Tree Guidelines requires a minimum of 170 new trees to replace the 135 protected trees that will be removed with implementation of the project. In addition to the number of replacement trees proposed on-site, the project will also need to adhere to the City's Protected Trees Ordinance requirements regarding replacement tree species and size at time of planting.

[24] One or more protected oak trees may be impacted by the sidewalk extension from Miramonte Road to the Residential parcel that may be required under the Development Agreement. A tree removal permit will be obtained, and protected trees to be removed shall be replaced at the ratios required per City Municipal Code Section 14.18.185.

PD Impact BIO-9: Development of the residential portion of the project would result in the removal of protected trees, including 126 protected coast live oaks. **(Significant Impact)**

Table 4.4-1: Trees Proposed for Removal

Species	Diameter in Inches: Single-trunk below 10 inches (in.) or Multi-trunk below 20 in.	Diameter in Inches: Single-trunk 10 inches or above or Multi-trunk 20 in. or above	Total
Residential Parcel			
Almond	1	-	1
Arroyo willow	-	1	1
Big leaf maple	1	1*	2
Blue gum	-	17	17
Blue oak	-	1*	1
California bay	1	1*	2
California black walnut	2	10	12
Coast live oak	83	126*	209
Deodar cedar	-	-	0
Fremont cottonwood	1	1	2
Mexican fan palm	-	1	1
Monterey pine	2	-	2
Olive	-	-	0
Valley oak	4	4*	8
Subtotal	**95**	**163**	**258**
Offsite or Corridor Parcel			
African fern pine	-	1	1
Big leaf maple	1	-	1
Coast redwood	-	1	1
Deodar cedar	-	1*	1
Olive	-	1	1
Valley oak	-	1*	1
Subtotal	**1**	**5**	**6**
Total	**95**	**169**	**264**

Notes
*= Protected trees under the City of Cupertino Tree Ordinance (135 trees)

4.4-2: Protected Trees Proposed for Removal			
Trunk Size of Removed Tree	**Trees to be Removed**	**Replacement Tree Guidelines**	**Required Replacement Trees**
Up to 12”	30	One, 24” box tree	30, 24” box trees
Over 12” and Up to 18”	35	Two, 24” box trees	70, 24” box trees
Over 18” and Up to 36**”**	56	Two, 24” box trees or One, 36” box tree	56, 36” box trees
Over 36”	14	One, 36” box tree	14, 36” box trees
TOTAL	**135**	**--**	**170 trees minimum**

Mitigation Measures: As conditions of approval, the proposed project shall implement the following measures to reduce impacts to trees to a less than significant level:

PD MM BIO-9.1: The project shall implement the following measures to avoid impacts to trees proposed for retention and mitigate for tree removal:

- Protected trees to be removed shall be replaced at the following ratios per City Municipal Code Section 14.18.185:

Table 4.4-2: Tree Replacement Ratios	
Trunk Size of Removed Tree (measured at 4.5 feet above grade)	**Replacement Trees**
Up to 12 inches	One 24-inch box tree
Over 12 inches and up to 18 inches	Two 24-inch box trees
Over 18 inches and up to 36 inches	Two 24-inch box trees or one 36-inch box tree
Over 36 inches	One 36-inch box tree

  The species and location of the replacement trees within the City of Cupertino and monitoring of replanting success shall be approved by the City of Cupertino arborist and Community Development Director, in conformance with the City’s Protected Tree Ordinance requirements.

- To reduce the impact of construction on the trees remaining on the site and the trees adjacent to the site, tree protection and preservation measures (e.g., designate tree protection zones for all trees on and adjacent to the site) shall be implemented by the project. The specific measures to be implemented by the project are listed on pages 13-15 of the arborist report (refer to Appendix D of this Initial Study).

Replacement tree plantings (onsite and offsite) would off-set the removal of Protected trees resulting from the project. Oversight of construction activities by a certified arborist and implementation of specific tree protection measures will avoid substantial impacts to the mature trees that will be retained adjacent to the site. **(Less Than Significant Impact with Mitigation Incorporated)**

Park Parcel and
Offsite Dedications, Easements, and Land Trades

Future development on the Park parcel, the historic haul road, and old quarry area associated with trail and parking lot easements could include trail improvements or construction of new trails and a public parking lot. Native and non-native trees throughout the area and some tree removal could be required to accommodate the development of trails connecting Linda Vista Park and Stevens Creek County Park and construction of the parking lot. If a substantial number of native trees, such as coast live oak, valley oak, big leaf maple, Fremont cottonwood, or willow, are removed, impacts to trees could be significant.

DA Impact BIO-10: Construction of new trails, if located in woodland areas, could result the loss of mature native trees. **(Significant Impact)**

Mitigation Measures:

Program Mitigation and Avoidance Measures. Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating impacts to special areas of natural vegetation and wildlife habitation, including local tree resources. Future trail and parking lot construction would be subject to the development policies listed in the City's General Plan, including the following:

Policy 5-11- Natural Area Protection. Preserve and enhance the existing natural vegetation, landscape features, and open space when new development is proposed.

Policy 5-14 – Recreation and Wildlife Trails. Provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered or designated as species of special concern.

The following measures are included in the Development Agreement to avoid or reduce impacts to mature, native trees from future trail construction or reconstruction:

DA MM BIO-10.1: Arborist Tree Survey and Tree Protection and Preservation Plan. A tree survey of proposed trail alignments shall be conducted prior to city approval of final trail design by an International Society of Arboriculture (ISA) Certified Arborist as a part of trail design or other recreational features. The results shall be presented in a survey report along with tree protection and impact avoidance measures. Trails shall be routed to avoid and protect significant, mature native trees where feasible. If trees must be removed, they shall be mitigated with replacement plantings of locally native trees at a minimum 1:1 ratio, onsite, within the City of Cupertino or within adjacent regional park facilities.

Native trees (more than six inches in diameter DBH that are removed in riparian areas shall be replaced at a 3:1 ratio onsite to the extent feasible or within the same watershed of Stevens Creek using local, native riparian trees. Any revegetation efforts in riparian areas shall be completed prior to the rainy season and the plantings shall be maintained until successfully established.

In addition, the standards in the City of Cupertino's Protected Tree Ordinance will apply to trees protected under the ordinance. Compliance with the ordinance will thus mitigate the removal of mature native trees and protect trees that are retained near trail retaining walls or grade changes. If trails are later developed, they shall also be routed to avoid and protect significant, mature trees where feasible. **(Less Than Significant Impact with Mitigation)**

4.4.4 Conclusions

4.4.4.1 *Development of Residential Parcel and Associated Improvements*

PD Impact BIO-1: Construction and occupation of residences and an access road, with the implementation of MM BIO-1.1 through MM BIO-1.10, would not result in significant impacts to riparian habitat and aquatic habitat and water quality along Stevens Creek. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact BIO-4: Impacts to aquatic habitats occupied by steelhead would be reduced to a less than significant level through design of the onsite drainage system and implementation of Standard Project Conditions for construction and post-construction water quality control in the City of Cupertino's Municipal Code Chapter 9.18 and mitigation measures PD MM BIO-1.2 and 1.10. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact BIO-5: Impacts to red-legged frogs during construction of the proposed residences would be reduced to a less than significant level with implementation of MM BIO-5.1 through MM BIO-5.3. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact BIO-6: Construction and occupation of residences and an access road, with the implementation of MM BIO-6.1, would not result in substantial impacts to local San Francisco dusky-footed woodrat populations. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact BIO-7: Future project construction activities, with implementation of MM BIO-7.1 through MM BIO-7.3, would not disturb the nests of migratory birds. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact BIO-9: Adherence to the City of Cupertino Protected Tree Ordinance and the tree protection measures, as described in MM BIO-9.1, would reduce impacts to

protected trees to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.4.4.2 *Potential Impacts of Future Trails and Parking Lot*

DA Impact BIO-2: Future trail construction on the Corridor or Park parcels and offsite trail and parking lot easements could result in direct and indirect impacts to sensitive riparian, aquatic and/or wetland habitats. Implementation of Program Mitigation Measures and measures in the Development Agreement would reduce potential impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact BIO-3: Future trail construction on the Corridor or Park parcels and offsite trail and parking lot easements could impact localized populations of special-status plant species. Implementation of Program Mitigation Measures and measures in the Development Agreement would reduce potential impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact BIO-8: Future trail construction on the Corridor or Park parcel and offsite trail and parking lot easements potentially could affect special-status animals or fish. Implementation of Program Mitigation Measures and measures in the Development Agreement would reduce potential impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact BIO-10: Future trail construction on the Corridor or Park parcel and offsite trail and parking lot easements, if located in woodland areas, could result the loss of mature native trees. Implementation of Program Mitigation Measures and measures in the Development Agreement would reduce potential impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.5 CULTURAL RESOURCES

This section is based, in part, on the results of an archaeological literature reviews at the Northwest Information Center by *Holman & Associates* in January 2013 and September 2001. Copies of these reports are on file with the City of Cupertino.

4.5.1 Setting

4.5.1.1 *Prehistoric Context and Resources*

The project site is located in the Santa Clara Valley. Native American occupation of the valley extended over 5,000 to 8,000 years and possibly longer. Before European settlement, Native Americans resided in the area that is now Cupertino and lived in the Rancho San Antonio area for over 3,000 years. The South Bay Area's favorable environment during the prehistoric period included alluvial plains, foothills, many water courses, and bay margins that provided an abundance of wild food and other resources.

The Native American people who originally inhabited the Santa Clara Valley belong to a group known as the "Coastanoan" or Ohlone, who broadly occupied the central California coast from the northern tip of the San Francisco Peninsula to Big Sur in the south and as far east as the Diablo Range. The Coastanoan/Ohlone people engaged in a hunting, fishing and collecting economy focusing on the collection of seasonal plant and animal resources. However, their traditional lifestyle disappeared by about 1810 when it was disrupted diseases, a declining birth rate, and the introduction of the California mission system established by the Spanish in the San José/Santa Clara area in 1777.

In the Cupertino area, areas likely to be archaeologically sensitive, are found along stream courses and in oak groves. The portion of the project site that would be developed is located northwest of Stevens Creek. The 4.1-acre Corridor parcel includes a portion of the creek, but this would not be developed. The 29.8-acre Park parcel is located immediately south of the creek, but would not be developed. The historic haul road, which would be dedicated to the City for possible future use as a trail connecting McClellan Ranch Preserve and Linda Vista Park, is located between 100 and 700 feet from Stevens Creek.

There are no recorded prehistoric archaeological sites on the project site or within one-quarter mile. Based upon the results of three cultural resources studies done at the project site, the potential for archaeological resources to be present at the site is low.

4.5.1.2 *Historic Resources*

The project site is located near the former McDonald-Dorsa Quarry, but this quarry has been inactive for several decades and is not mapped as a historic resource. Evidence of what appeared to be a former olive grove was located during Holman's 2001 survey, and the fact that this grove existed was confirmed during further investigation in 2013. Additionally, vineyards were located on the Residential parcel. Neither the vineyards nor the olive groves remain on site. No historic resources

were identified during the investigations, though the low potential for trash deposits associated with the period of use as a vineyard exists.

The Cupertino General Plan identifies Historic Sites, Commemorative Sites and Community Landmarks currently present in the City (Figure 2-G in the General Plan). No such sites are located on the project site. The following three historic sites and one commemorative site are located in the project area:

- De La Vega Tack House - located within the Rancho Deep Cliff Home Owners Association.
- Baer Blacksmith - located in the McClellan Ranch Preserve.
- Enoch J. Parrish Tank House - located in the McClellan Ranch Preserve.
- Doyle Winery "Cupertino Wine Company" - located in the McClellan Ranch Preserve.

Historical resources eligible for listing in the California Register must meet criteria of significance *and* retain enough of their historic character or appearance to be recognizable as historical character to convey the reasons for their significance. There are presently no structures or other notable historical features on or immediately adjacent to the project site.

4.5.1.3 *Paleontological Resources*

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. The project site is underlain by Holocene alluvial fan material deposits which have high potential to yield fossils.[25, 26]

4.5.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	1, 2, 10
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☒	☐	☐	1, 10
3. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐	1, 10

[25] Hanson, C. Bruce, Paleontological Evaluation Report for the Envision San José 2040 General Plan, Santa Clara County, California, 2010.
[26] U.S. Geological Survey. "Preliminary quaternary geologic maps of Santa Clara Valley, Santa Clara, Alameda, and San Mateo counties, California: A digital database". Accessed December 23, 2013. Available at: < http://pubs.usgs.gov/of/1994/of94-231/sccomap.pdf >

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
4. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1, 10

4.5.3 Discussion of Impacts

4.5.3.1 *42.4-acre Site*

Prehistoric, Historic, and Paleontological Resources

Though the project is located near Stevens Creek and oak groves, the site has been surveyed multiple times for cultural resources with no findings. There are no structures located on the site, and the site is not recognized in the Cupertino General Plan as a Historic Site, Commemorative Site or Community Landmark. For these reasons, it is considered unlikely that prehistoric or historic materials would be encountered during site grading and/or excavation associated with the construction of the proposed 18 residences on the Residential parcel.

While unlikely, buried prehistoric or historic deposits providing information on prehistory or the history of the site, its inhabitants, and the role it played in the development of the City could be encountered during construction activities. Additionally, the project site is underlain by Holocene alluvial fan material deposits, which have high potential to yield fossils.

PD Impact CUL-1: The proposed development of 18 residences on the Residential parcel could result in significant impacts to buried cultural and/or paleontological resources, if encountered. **(Significant Impact)**

Mitigation Measures: As a condition of approval, the proposed project shall implement the following mitigation measures to reduce impacts to cultural resources to a less than significant level:

PD MM CUL-1.1: In the event of the discovery of prehistoric or historic archaeological deposits or paleontological deposits, work shall be halted within 50 feet of the discovery and a qualified professional archaeologist (or paleontologist, as applicable) shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate mitigation. The recommendation shall be implemented and could include collection, recordation, and analysis of any significant cultural materials.

PD MM CUL-1.2: In the event that human remains and/or cultural materials are found, all project-related construction shall cease within a 50-foot radius of the find in order to proceed with the testing and mitigation measures required. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:

- In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

- A final report summarizing the discovery of cultural materials shall be submitted to the Director of Community Development prior to issuance of building permits. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusion, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the Director of Planning.

4.5.3.2 *Offsite Dedications, Easements, and Land Trades*

The proposed project includes several offsite components, including dedication of the former quarry haul road, trail and parking lot easements through the old quarry property, and a possible land trade with Deep Cliff Golf Course. The offsite components could allow for future trail and parking lot construction on the former quarry haul road and old quarry property. The project area has been surveyed multiple times for cultural resources with negative results. Therefore, it is considered unlikely that prehistoric materials would be encountered during trail and parking lot construction.

There are no historic structures located on the properties associated with the offsite components, and future trail and parking lot construction would not affect a historical resource or a site recognized in the Cupertino General Plan as a Historic Site, Commemorative Site or Community Landmark.

While unlikely, buried prehistoric or historic deposits providing information on prehistory or the history of the project area, its inhabitants, and/or the role it played in the development of the City could be encountered during trail construction activities. Additionally, the project area is underlain by Holocene alluvial fan material deposits, which have high potential to yield fossils.

DA Impact CUL-2: Future trail and parking lot construction could result in significant impacts to buried cultural and/or paleontological resources, if encountered. **(Significant Impact)**

Mitigation Measures: Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California, the following mitigation measures would be implemented to reduce impacts to cultural resources to a less than significant level:

DA MM CUL-2.1: Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:

- In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

- A final report summarizing the discovery of cultural materials shall be submitted to the Director of Community Development prior to issuance of building permits. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusion, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the Director of Planning.

4.5.4 Conclusion

PD Impact CUL-1: Although not anticipated, proposed development of 18 residences on the Residential parcel could result in significant impacts to buried cultural resources. Implementation of mitigation measures MM CUL-1.1 and MM CUL-1.2, as proposed by the project, would reduce impacts to cultural resources to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact CUL-2: Although not anticipated, future trail construction could result in significant impacts to buried cultural and/or paleontological resources, if encountered. Implementation of mitigation measures DA MM CUL-2.1, pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California, would reduce impacts to cultural resources to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.6 GEOLOGY AND SOILS

The following discussion is based on a geotechnical investigation completed for the Residential parcel by *ENGEO Incorporated* in August 2013, and revised most recently in January 2014. A copy of this report is included in Appendix E of this Initial Study.

The discussion of the remainder of the 42.4 acre site and offsite dedication areas is based, in part, on the Parkside Trails Feasibility Study (Jana Sokale Environmental Planning, et al., June 2014) (Appendix A). The trail connections shown in the Parkside Trails Feasibility Study were identified for initial planning and scoping purposes and may not reflect ultimate trail alignments. As stated previously, the intent of the trails feasibility study was for the City to assess the potential cost and process for developing trails. Preparation of the trails feasibility study should not infer actual construction of the trails described in the report.

4.6.1 Setting

4.6.1.1 *Geologic Overview*

The project site is located at the edge of the Santa Clara Valley, a broad, sediment-filled basin bounded on the southwest by the Santa Cruz Mountains and the on the northeast by the Diablo Mountain range. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains. The Hayward and Calaveras Fault systems exist within the Diablo Range. Most of Cupertino is on level ground that rises gently to the west. Elevations in the project area vary from 375 feet above sea level along Stevens Creek to 470 feet along Stevens Canyon Road.

4.6.1.2 *Residential Parcel*

The current topography of the Residential parcel is characterized as a south-to-southeast sloping terrace with more steeply inclined slopes on the southern portion of the site above and adjacent to Stevens Creek. A former quarry haul road traverses the Residential parcel from Stevens Canyon Road on the west to a former creek crossing located near the southeastern portion of the Residential parcel. The original topography of the site has been modified by grading of the former quarry haul road and filling of a former steeply incised drainage in the northwest portion of the site.

Soils

Borings were taken to characterize soils on the Residential parcel. The following soil types were encountered:

Quarry fill associated with the former quarry haul road occurs along a roughly east-west strip across the site and is thickest in the eastern portion of the site. The fill was placed at steep slope gradients along Stevens Creek to create the haul road. The edges of the fill exhibit erosion gullies and are subject to instability. Borings encountered fill deposits ranging from seven to 24 feet thick. The fill is generally comprised of a mixture of loose to medium dense, silty sand, clayey sand, and clayey gravel.

Alluvium was encountered along the creek and beneath the fill in the southeast portion of the site. One boring encountered an approximately 23-foot thick deposit of alluvium. The alluvial deposits are generally comprised of loose to medium dense, sand, silty sand, and gravel.

Older Alluvium was encountered below the fill in three borings, ranging from five to 11 feet thick. The older alluvial deposits are generally comprised of very stiff sandy lean clay and medium dense to dense silty sand with clay, and clayey sand with gravel.

Alluvial Terrace Deposits, approximately 12 feet thick, were mapped in the west and northeast portions of the site. Numerous test pits excavated at the site also encountered alluvial terrace deposits. The alluvial terrace deposits are generally comprised of very dense, clayey sand or clayey gravel, with fine to coarse grained gravel and cobbles. The clay content with in these deposits varied such that some could be described as very stiff to hard, sandy or gravelly clays.

Santa Clara Formation was encountered below the alluvium within all of the borings and many of the test pits at the site. The Santa Clara Formation was generally comprised of poorly cemented, weak to extremely weak, freshly to highly weathered dark bluish gray and brown, poorly sorted sandstone and conglomerate.

Expansive soils shrink and swell as a result of moisture content fluctuation. This can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. The soils on the site are considered to have low to moderate expansive potential.

Groundwater

Groundwater is present under the Residential parcel at depths between 24 feet below ground surface (bgs) and 40.5 feet bgs. These depths correspond to a groundwater elevation ranging between 370.5 to 376 feet above mean sea level. Fluctuations in the level of groundwater may occur due to variations in rainfall, irrigation practice, and other factors not evident at the time the measurements were made.

Seismicity and Seismic Hazards

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with the crustal movements along well-defined active fault zones of the San Andreas Fault system, which regionally trend in the northwesterly direction.

Nearby active or potentially active faults include Monte Vista, San Andreas, Hayward, and Calaveras, which are located approximately 800 feet northeast, 3.4 miles southwest, 13 miles northeast, and 15.8 miles northwest of the Residential parcel, respectively. Because of the proximity of the Residential parcel to these faults, ground shaking, ground failure, or liquefaction due to an earthquake could cause damage to structures. Most of the seismic risk for a large earthquake (up to 7.9 on the moment magnitude scale) comes from the Monte Vista and San Andreas faults.

The Residential parcel is not located in an Alquist-Priolo fault zone; however, the Monte Vista fault is considered active by the City of Cupertino and Santa Clara County. For this reason, the site is considered to be in fault rupture hazard zone by the City of Cupertino and Santa Clara County.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose, water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level. The Residential parcel is within a mapped liquefaction hazard zone.

Lateral Spreading

Lateral spreading is a failure within a nearly horizontal soil zone, commonly associated with liquefaction, which causes the underlying soil mass to move toward a free face, or down a slope. Layers of loose to medium-dense sands and gravels were encountered in three borings which have a potential for liquefaction. Liquefaction below the groundwater level during earth shaking will result in strength loss and deformation. Because of this, the risk of lateral spreading in the area where young alluvial deposits underlie the undocumented fill along Stevens Creek is considered high.

Landslides

Landslides are the failure of slopes or hillsides. Natural factors make a site prone to landslides, but the landslide itself most often requires a trigger such as a seismic event. No landslides are mapped within or immediately adjacent to the Residential parcel, however, it is mapped within a landslide hazard zone. The steep creek banks below the Residential parcel could become unstable during seismic events and are considered moderately to highly susceptible to earthquake induced landslides.

4.6.1.3 Park and Corridor Parcels and *Offsite Dedications, Easements, and Land Trades*

The geologic constraints occurring on the Park and Corridor parcels and offsite dedications, easements, and land trades were evaluated in the Parkside Trails Feasibility Study (Jana Sokale Environmental Planning, et al., June 2014) (Appendix A). This included reviewing existing maps and reports, evaluating historic aerial photographs, geologic mapping, creating geologic cross sections and walking the site.

A wide variety of geologic conditions occur across the land associated with the offsite dedications, easements, and land trades. These areas are characterized, in general, by moderately steep to steep natural, rolling hillside topography, which has been modified in the areas of the former quarry. The steep quarry slopes range in height from 100 to 250 vertical feet. Similar to those described above for the 42.4-acre site, possible geology and soil hazards on the land associated with the offsite dedications, easements, and land trades, include expansive soil, fault rupture, liquefaction, lateral spreading, and landslides.

4.6.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
5. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a. Rupture of a known earthquake fault, as described 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.)	☐	☐	☒	☐	11
b. Strong seismic ground shaking?	☐	☐	☒	☐	11
c. Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐	11
d. Landslides?	☐	☒	☐	☐	11
6. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	11
7. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐	11
8. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☒	☐	11
9. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1

4.6.3 Discussion of Impacts

4.6.3.1 Residential Parcel

The Residential parcel slopes downward from Stevens Canyon Road in a southeasterly direction towards Stevens Creek. Substantial grading is required to construct the proposed residences. The conceptual grading and drainage plan is shown on Figure 3.2-3. Grading is required across most of the Residential parcel to construct the entrance road, private cul-de-sacs, level building pads,

driveways, and a stormwater bioretention area, which will balance with approximately 30,000 cubic yards of cut and fill. Grading on the Residential parcel is also required to overexcavate and reuse areas of undocumented fill and to stabilize slopes along Stevens Creek, which will also balance with approximately 100,000 cubic yards of cut and fill. Soil would not be imported or exported to or from the Residential parcel. No grading would occur within 30 feet of the Stevens Creek riparian corridor, except for the temporary disturbance of 0.02 acre of riparian habitat during construction of the bioretention basin.[27] Retaining walls ranging from 1.5 to 10 feet in height are required at various locations across the entire Residential parcel. The entry roadway will require the tallest aboveground retaining wall, which would be up to 10 feet in height. All other aboveground retaining walls would be five feet or less in height. A below-grade retaining wall ranging in height from approximately 30 to 60 feet is proposed along an approximately 600-foot section of the entry roadway, but will be constructed completely below grade and, therefore, will not be visible (refer to MM GEO1.1).

Fault Rupture

The Residential parcel is not located in an Alquist-Priolo fault rupture hazard zone. It is, however, located within Monte Vista fault rupture hazard zone. The Monte Vista fault is located 800 feet northeast of the site. No geomorphic features indicative of active faulting were identified on the site during the preparation of the project geotechnical report. Based on the geological field-mapping, review of aerial photographs by a certified geologist, and the results of the geotechnical field investigation, a fault-related ground rupture on the Residential parcel is unlikely. **(Less Than Significant Impact)**

Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking at the Residential parcel, similar to that which has occurred in the past. All structures would be designed using sound engineering judgment and adhere to the 2013 California Building Code. Adherence to the building code would ensure the proposed structures resist minor earthquakes without damage and major earthquakes without collapse. **(Less Than Significant Impact)**

Liquefaction and Soil Stability

The Residential parcel is located in a liquefaction hazard zone and soil borings concluded medium dense sand and well-graded gravels on the site are potentially liquefiable. To improve soil stability and per the recommendations of the geotechnical report completed for the proposed residential development, all non-engineered fill would be overexcavated to competent native soil and bedrock, except for some of the fill located along the southern portion of the Residential parcel and the north side of Stevens Creek. The creek is steeply incised with eroded vertical banks at multiple locations. Due to site constraints, complete removal of this fill along Stevens Creek is not possible.

[27] The Stevens Creek riparian corridor is defined as the top of bank of the creek or the edge of the existing riparian vegetation, whichever is greater.

PD Impact GEO-1: Portions of the slope above Stevens Creek are liquefiable and unstable with the potential to fail. **(Significant Impact)**

Mitigation Measures: The following mitigation measure is proposed to stabilize the slope along Stevens Creek and reduce the potential for slope failure to a less than significant level:

PD MM GEO-1.1: A permanent, below-grade retaining wall would address long-term seismic slope stability in areas that cannot be stabilized through grading and removal of unstable fill. The below-grade retaining wall would range in height from approximately 30 to 60 feet and would extend along an approximately 600-foot section of the entry roadway, starting approximately 500 feet in from Stevens Canyon Road. The location of the below-grade retaining wall is identified as Case 2 and Case 3 on Figure 4.6-1 and cross-sections are shown on Figure 4.6-2. The below-grade retaining wall will be a mechanically stabilized earth (MSE) wall. A MSE wall is a type of reinforcement that may consist of precast, segmental blocks, panels or geocells that are filled with granular soil, which retains backfilled soil. The reinforced soil mass, along with a facing, forms the wall. The project proposes to construct a MSE wall once fill materials are removed as part of onsite excavation. The proposed MSE wall would be covered with engineered fill materials and be below the final site grade. The MSE wall would be designed and constructed in general conformance with the American Association of State Highway and Transportation Officials (AASHTO) LRFD Bridge Design Specifications (Sixth Edition) and AASHTO LRFD Construction Specifications (Third Edition) or latest edition and interim revisions at the time of design. The MSE wall design would be required to account for groundwater depths, site drainage, and utilities. Final wall design shall be approved by the Cupertino Building Official, and construction shall be supervised certified by a Certified Geotechnical Engineer.

Landslides

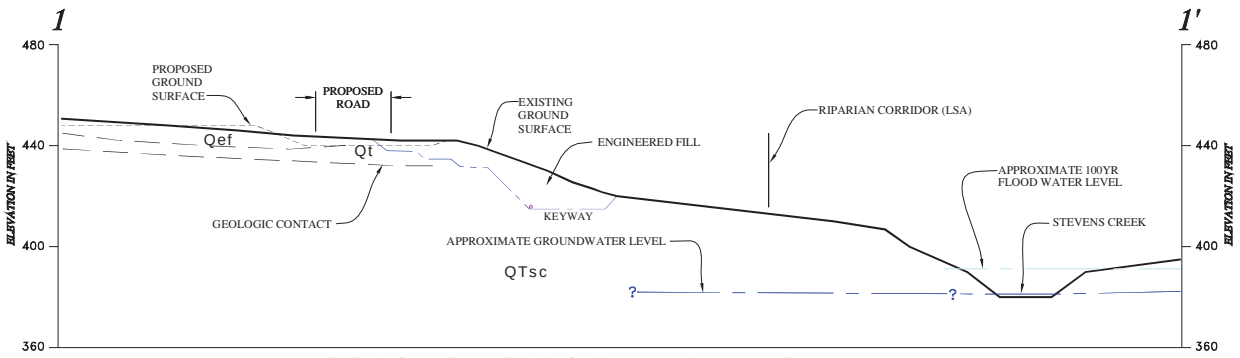
No landslides have been mapped within or immediately adjacent to the Residential parcel. However, the steep creek banks located along the southern portion of the Residential parcel and the north side of Stevens Creek are potentially unstable during seismic loading and have a moderate to high susceptibility to earthquake-induced landslides along the creek. The slope stabilization measure described above in MM GEO-1.1 would reduce the threat of landslides on the Residential parcel to a less than significant level. **(Less Than Significant with Mitigation Incorporated)**

Erosion

Substantial grading is proposed to construct the proposed residences, and steep slopes would exist on the Residential parcel upon project completion. Implementation of MM GEO-1.1 would stabilize the existing steep, eroding slopes of non-engineered fill along Stevens Creek. As discussed in Section 4.9, Hydrology and Water Quality, standard conditions in conformance with the City of Cupertino's Municipal Code Chapter 9.18, would be implemented to avoid erosion during and after construction of the proposed residences. Given the substantial amount of proposed grading, the steep slopes that would exist on the Residential parcel upon project completion, and the location of Stevens Creek and associated steelhead habitat immediately downslope of the Residential parcel, however, standard

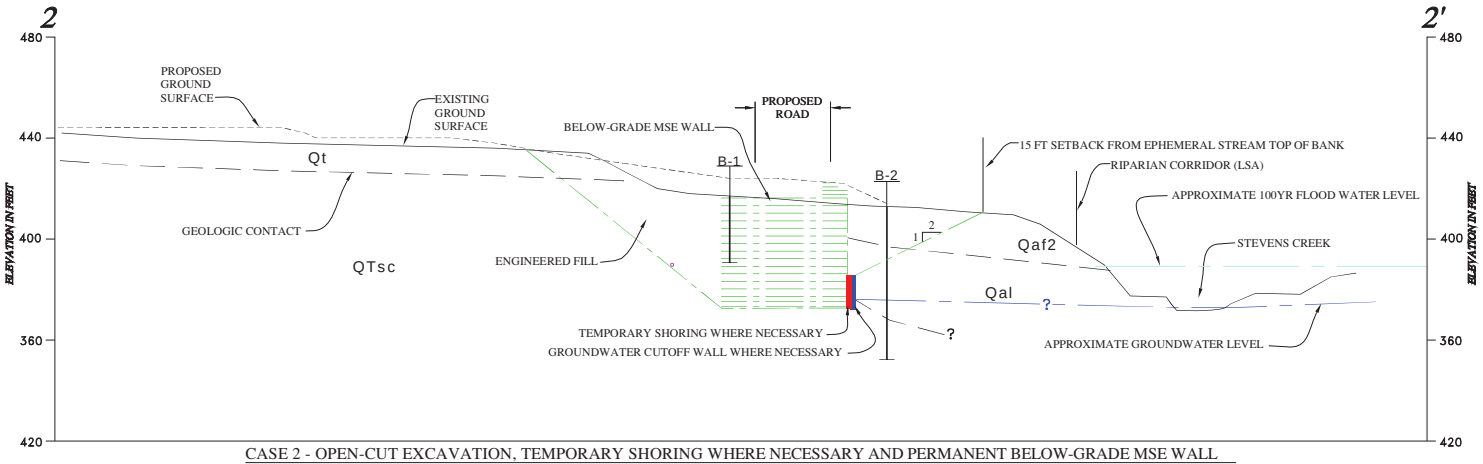
CREEK BANK STABILIZATION

FIGURE 4.6-1



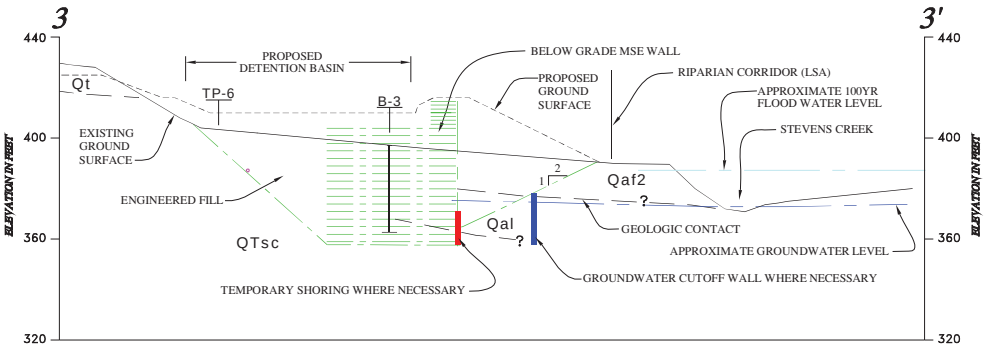
CASE 1 - OPEN-CUT EXCAVATION AND KEYWAY WITH ENGINEERED FILL

SECTION 1-1'



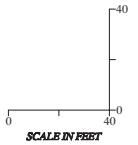
CASE 2 - OPEN-CUT EXCAVATION, TEMPORARY SHORING WHERE NECESSARY AND PERMANENT BELOW-GRADE MSE WALL

SECTION 2-2'



CASE 2 - OPEN-CUT EXCAVATION, TEMPORARY SHORING WHERE NECESSARY AND PERMANENT BELOW-GRADE MSE WALL

SECTION 3-3'



EXPLANATION

Qaf1	UNDOCUMENTED FILL
Qaf2	UNDOCUMENTED FILL ASSOCIATED WITH FORMER QUARRY HAUL ROAD
Qef	ENGINEERED FILL ASSOCIATED WITH CITY OF CUPERTINO UNREGISTERED LANDFILL RESTORATION
Qal	ALLUVIUM (HOLOCENE)
Qoal	OLDER ALLUVIAL DEPOSITS WITH HIGHER FINES CONTENT AND MORE DENSE THAN Qal
Qt	ALLUVIAL TERRACE DEPOSITS (PLEISTOCENE)
QTsc	SANTA CLARA FORMATION (SANDSTONE AND CONGLOMERATE)
B-3	APPROXIMATE LOCATION OF BORING
TP-6	APPROXIMATE LOCATION OF TEST PIT

ENGEO Expect Excellence

SLOPE STABILITY MITIGATION CROSS SECTIONS
PARKSIDE TRAILS
CUPERTINO, CALIFORNIA

PROJECT NO.: 10014.000.000
SCALE: AS SHOWN
DRAWN BY: SRP
CHECKED BY: BR

FIGURE NO. 8A

ORIGINAL FIGURE PRINTED IN COLOR

CREEK BANK STABILIZATION CROSS-SECTIONS

FIGURE 4.6-2

measures may not be sufficient to ensure erosion does not occur during and after project construction.

PD Impact GEO-2: Standard measures may not be sufficient to ensure erosion does not occur during and after construction of the proposed residences. **(Significant Impact)**

Mitigation Measures: The following mitigation measure is proposed to ensure the potential for erosion during and after construction of the proposed residences is reduced to a less than significant level:

PD MM GEO-2.1: In conformance with the City of Cupertino's Municipal Code (Section 16.08.110 Interim Erosion and Sediment Control Plan), the project applicant shall prepare and submit an Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan to the City for review and approval to ensure the measures are acceptable and meet all applicable resource agency standards. The purpose of the Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan is to stabilize the soil, to reduce raindrop impact, to reduce the velocity of surface runoff, to prevent erosion, and ensure revegetation success. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall include specific measures that specially target any slopes which drain to the creek. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall specify the following and the location of all the measures listed in the plan shall be depicted on a site map:

- A delineation and brief description of the measures to be undertaken to retain sediment on the site, including, but not limited to, the designs and specifications or berms and sediment detention basins, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the surface runoff and erosion control measures to be implemented, including, but not limited to, types and methods of applying mulches, and designs and specifications for diverters, dikes and drains, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the vegetative measures to be undertaken, including, but not limited to, seeding methods, and type, location and extent of preexisting and undisturbed vegetation types, and a schedule for maintenance and upkeep.

4.6.3.2 *Park and Corridor Parcels and Offsite Dedications, Easements, and Land Trades*

The Park and Corridor parcels and offsite dedications, easements, and land trades are mapped within fault rupture, slope instability, liquefaction/inundation, and/or hillside geologic hazard zones by the City of Cupertino. Possible future trail and parking lot construction on the old quarry property would traverse steep slopes that are currently subject to erosion and landslides and/or the slopes could become susceptible to erosion and landslides as a result of trail and parking lot construction. Trail and parking lot construction could exacerbate or result in erosion or landslides, if slopes are exposed or over-steepened during grading, or drainage is not properly managed. Structures, such as foot bridges, may be a necessary component of a future trail alignment. Trail structures and the parking lot could be exposed to and damaged by geologic hazards such as landslides, erosion, and expansive

soil. Future trail and parking lot construction would not include structures that would be occupied by people, however, trail users could be injured as a result of unstable soil conditions such as landslides.

DA Impact GEO-3: Future trail and parking lot construction could create, exacerbate, and/or be exposed to geology and soil hazards such as landslides and erosion. **(Significant Impact)**

Program Mitigation and Avoidance Measures: Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating geologic and seismic hazard impacts resulting from planned development within the City. Future trail and parking lot construction would be subject to the following Health and Safety General Plan policy:

DA MM GEO-3.1: Policy 6-1: Seismic/Geologic Review Process Evaluate new development proposals within mapped potential hazard zones using a formal seismic/geologic review process. Use Table 6-D of this Hazards Analysis to determine the level of review required.

- Per Table 6-D of the General Plan, the following level of review would be necessary for future trail construction:
  - Uniform Building Code
  - Soil and Foundation Investigation
  - Geotechnical Investigation

As identified in the Parkside Trails Feasibility Study, the following measures are included in the Development Agreement to avoid or reduce geology and soils impacts resulting from future trail construction or reconstruction:

- Geotechnical investigations, including subsurface testing, will be completed at specific locations along future trail alignments, prior to city approval of final trail and parking lot design. These investigations are needed to fully assess the design parameters and determine the best geotechnical design approach for footbridges, retaining walls and areas of engineered fill placement. The specific locations will depend on the ultimate proposed trail alignments and trail type selected, and could include the following:
  - the saddle on the eastern ridge of the quarry,
  - the gully below the saddle,
  - the narrow bank along Stevens Creek, and
  - the southeastern quarry slope crossing.

- All future trail construction will follow the recommendations of the geotechnical investigations and all future trails will be routed to avoid unstable areas and/or will be designed and constructed to meet generally acceptable design standards, as specified in the following documents to ensure that there will be no significant risk of landslide, slope instability, accelerated erosion or other geologic hazards:
  - 2005 Cupertino General Plan
  - 1995 Santa Clara Countywide Trails Master Plan
  - 1999 Santa Clara County Interjurisdictional Trail Design, Use and Management Guidelines

- 2005 Santa Clara County Parks and Recreation Department Trail Maintenance Manual
- 2006 Santa Clara Valley Water District, Water Resources Protection Manual: Guidelines & Standards for Land Use Near Streams
- 2012 California Department of Transportation Highway Design Manual: Chapter 1000 Bicycle Transportation Design
- 2013 Architectural Barriers Act Accessibility Guidelines: Outdoor Developed Areas

4.6.3 Conclusion

PD Impact GEO-1: Construction of a permanent, below-grade retaining wall, as recommended in the project geotechnical investigation, would address long-term seismic slope stability in areas that cannot be stabilized through grading and removal of unstable fill. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact GEO-2: The Interim Erosion and Sediment Control Plan prepared for the proposed residences will be subject to City review and approval to ensure the measures are acceptable and meet all applicable resource agency standards for erosion control during and after construction of the proposed residences. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact GEO-3: Future trail and parking lot construction, consistent with the existing General Plan policy identified above, rules and regulations of local, state, and federal agencies, and the measures included in the Development Agreement would avoid exposing future trail structures, parking lot or users to significant geology and soil hazards. **(Less Than Significant Impact with Mitigation Incorporated)**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) have a broader, global impact. Global climate change associated with the greenhouse effect is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global climate change are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. The world's leading climate scientists have reached the consensus that global climate change is underway and is likely caused by human activity.[28] Humans generate GHGs through combustion of fossil fuels for energy production and transportation, decomposition of solid waste, burning of wood, deforestation, agriculture, and industrial activities.

4.7.1.1 *Applicable Plans, Policies, and Regulations*

State and local regulatory efforts that apply to the project are summarized below:

State of California Executive Order S-3-05

In June 2005, Governor Schwarzenegger issued Executive Order S-3-05, which identified CalEPA as the lead coordinating State agency for establishing GHG emission reduction targets in California. A "Climate Action Team," a multi-agency group was set up to implement Executive Order S-3-05. Under this order, the State plans to reduce GHG emissions to 80 percent below 1990 levels by 2050.

Assembly Bill (AB) 32 – The California Global Warming Solutions Act of 2006

California Assembly Bill (AB) 32, the California Global Warming Solutions Act, was signed into law in September 2006. With the passage of AB 32, the State of California made a commitment to reduce GHG emissions to 1990 levels by 2020, which represents about a 30 percent decrease over current levels. CARB's Discrete Early Actions include maximizing energy efficient building and appliance standards, pursuing additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursuing comparable investment in energy efficiency by all retail providers of electricity in California (including both investor-owned and publicly-owned utilities). In December 2008, CARB approved the Climate Change Scoping Plan, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals.

In May 2014, CARB will consider adoption of an updated Scoping Plan document. The 2014 update will define CARB's climate change priorities for the next five years and lay the groundwork to start

[28] National Aeronautics and Space Administration, Global Climate Change: Vital Signs of the Planet, Consensus, March 5, 2013. http://climate.nasa.gov/scientific-consensus

the transition to the post-2020 goals set forth in Executive Order S-3-05 and B-16-2012.[29] The 2014 update will highlight California's progress toward meeting the near-term 2020 greenhouse gas emission reduction goals defined in the 2008 Scoping Plan and evaluate how to align the State's longer-term greenhouse gas reduction strategies with other state policy priorities such as for water, waste, natural resources, agriculture, clean energy, transportation, and land use.

SB 375 – Sustainable Communities and Climate Protection Act

Senate Bill (SB) 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in 2008. It builds on AB 32 by requiring CARB to set regional targets for the purpose of reducing GHG emissions from passenger vehicles for 2020 and 2035. The per capita reduction targets set for passenger vehicles in the San Francisco Bay Area are a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, MTC and ABAG adopted *Plan Bay Area* in July 2013 as part of the Regional Transportation Plan process. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The project site is not located in a PDA.

Bay Area 2010 Clean Air Plan

The Bay Area 2010 Clean Air Plan (CAP) is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the 2010 CAP is climate protection. The 2010 CAP includes emission control measures and performance objectives consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

City of Cupertino General Plan

The Cupertino General Plan includes an Environmental Resources/Sustainability Section, with policies that call for energy efficiency, alternative transportation planning, and green building. These policies and the City's Green Building and Green Business Programs include measures designed to reduce energy and water use and associated direct and indirect greenhouse gas emissions.

The City also has adopted a construction and debris (C&D) recycling program ordinance that requires applicants seeking building or demolition permits for projects greater than 3,000 square feet to recycle at least 60 percent of project discards. Recycling can indirectly reduce greenhouse gas emissions by reducing the need to manufacture or mine new products or materials.

[29] Executive Order B-16-2012, issued by Governor Brown in March 2012, calls for expanded infrastructure to support zero emission vehicles and sets benchmarks for future state fleet vehicle purchases of zero emission vehicles. The executive order is available online at: http://gov.ca.gov/news.php?id=17472

City of Cupertino Green Building Ordinance

The City of Cupertino's Green Building Ordinance took effect July 1, 2013. The green building ordinance requires all buildings, structures, renovations, and tenant improvements to comply with the mandatory measures of the California Green Building Code and additional local amendments. Per the ordinance, new construction projects that include more than nine single-family homes must be LEED silver certified or meet a minimum GreenPoint rating (GPR) score of 50. Alternate standards may be approved at the discretion of City officials, however, these standards must be at least as stringent as the required LEED and GPR certifications.

4.7.1.2 *CEQA Guidelines*

As required under state law (Public Resources Code Section 21083.05), the California Natural Resources Agency has amended the state CEQA Guidelines to address the analysis and mitigation of GHG emissions. Lead agencies, such as the City of Cupertino, retain discretion to determine the significance of impacts from GHG emissions based upon individual circumstances. Neither CEQA nor the CEQA Guidelines provide a specific methodology for analysis of GHGs and under the amendments to the CEQA Guidelines, a lead agency may describe, calculate, or estimate GHG emissions resulting from a project and use a model and/or quantitative analysis or performance based standards to assess impacts.

Under the BAAQMD thresholds presented in 2011, if a project would result in an operational GHG emission of 1,100 metric tons of carbon dioxide equivalents (CO_2e) per year or more, it would make a cumulatively considerable contribution to GHG emissions and result in a cumulatively significant impact to global climate change. The BAAQMD guidelines do not suggest a threshold of significance for short-term construction related greenhouse gas emissions, but the Guidelines do recommend that agencies quantify construction-related GHG emissions using URBEMIS and make a significance determination based on compliance with AB 32.

The City has carefully considered the thresholds prepared by BAAQMD and regards the quantitative thresholds to be based on the best information available for residential and commercial development in the San Francisco Bay Area Air Basin.

4.7.1.3 *Existing Conditions*

The project site is currently undeveloped with minimal, if any, GHG emissions.

4.7.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1, 2, 8
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1, 2, 8

4.7.3 Discussion of Impacts

4.7.3.1 *Greenhouse Gas Emissions Impacts*

Operational Emissions

The 2011 BAAQMD CEQA Guidelines contain a screening threshold of 56 single-family dwelling units for operational impacts from GHG emissions. The proposed project would construct 18 single-family residences, which is well below the screening threshold. GHG impacts from projects below the threshold are not considered significant. The land dedications, easements, and land trades included in the proposed project would have no impact to GHG emissions. **(Less Than Significant Impact)**

4.7.3.1 *Greenhouse Gas Emissions Impacts*

Operational Emissions

The 2011 BAAQMD CEQA Guidelines contain a screening threshold of 56 single-family dwelling units for operational impacts from GHG emissions. The proposed project would construct 18 single-family residences, which is well below the screening threshold. GHG impacts from projects below the threshold are not considered significant. The land dedications, easements, and land trades included in the proposed project would have no impact to GHG emissions. **(Less Than Significant Impact)**

Construction Emissions

As recommended by the BAAQMD, construction emissions, including offsite construction vehicle travel, were calculated for the proposed construction of 18 residences on the Residential parcel. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod

Version: CalEEMod.2013.2.2). The calculated GHG construction emissions were 95 metric tons.[30] Construction emissions are generally amortized over at least a 20 year period; here, amortizing 95 metric tons of GHG emissions over 20 years would add only approximately five metric tons of GHG emissions per year.

BAAQMD's bright line threshold for development is 1,100 metric tons of CO_2 equivalents per year. Construction emissions, which would occur before occupancy of the residences, would be well below this threshold. The screening threshold of 56 single-family dwelling units for operational impacts from GHG emissions noted previously provides a conservative estimate of operations that could reach 1,100 metric tons per year. Proportionally, this would be equivalent to approximately 19.6 metric tons per residence per year, or 353 metric tons per year for the proposed 18 single-family dwellings. The estimate of construction emissions (five metric tons per year) in combination with operational emissions would be about 358 metric tons per year and therefore the project is far below the 1,100 tons per year threshold for greenhouse gas emissions. (**Less Than Significant Impact)**

4.7.3.2 *Consistency with Adopted Plans and Policies for GHG Reduction*

As discussed in previously in this section, California has adopted a Climate Change Scoping Plan. GHG emissions are also addressed in the adopted 2010 CAP and *Plan Bay Area*. The City of Cupertino is currently preparing a Climate Action Plan, however, the plan has not yet been finalized. There are no other regional plans that apply to projects in the City of Cupertino that have completed environmental review and been adopted.

Comparison of Project Features to State of California Climate Change Scoping Plan Measures

The CARB-approved Climate Change Scoping Plan outlines a comprehensive set of actions intended to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. The Scoping Plan includes 39 Recommended Actions for reducing greenhouse gas emissions. While the Scoping Plan focuses on measures and regulations at a statewide level, implementation of measures at the local level are also important. Recommended Actions/measures that pertain to the project are noted in Table 4.7-1.

Under the Scoping Plan, local governments are expected to reduce GHG emissions by five million metric tons (statewide) through transportation and land use changes. In addition, local governments play a key role in implementing many of the strategies contained in the Scoping Plan, such as energy efficient building codes, local renewable energy generation, and recycling programs. Energy efficiency, land use, transportation, and water conservation features consistent with several recommended actions in the Scoping Plan are listed in Table 4.7-1. These features would not conflict with implementation of recommended actions in the Scoping Plan intended to reduce GHG emissions by the year 2020. **(Less Than Significant Impact)**

[30] Illingworth & Rodkin, Inc., Acoustical and Air Quality Consultants. Parkside Trails CalEEMod Output. June 13, 2014.

Table 4.7-1: Climate Change Scoping Plan – Applicable Recommended Actions Compared to Project Features

Measure	Description	Applicable Feature
Transportation		
T-3	Regional Transportation-Related Greenhouse Gas Targets	The project is located at the boundary of the City of Cupertino, in the general proximity of jobs and services. There is no transit serving the site.
Energy Efficiency/Electricity and Natural Gas		
E-1	Energy Efficiency, including more stringent building standards	CalGreen Building Codes and the Cupertino Green Building Ordinance will apply.
E-4	Million Solar Roofs/Solar Initiative	Not currently proposed.
CR-1	Energy Efficiency – Utility, Building and Appliance Standards	CalGreen Building Codes and the Cupertino Green Building Ordinance will apply.
CR-2	Solar Water Heating	Not currently proposed.
Green Buildings		
GB-1	Green Buildings	CalGreen Building Codes and the Cupertino Green Building Ordinance will apply.
Water		
W-1	Water Use Efficiency	Project will use low flow plumbing fixtures. The City's Landscape Ordinance, which requires low water use landscaping and reduction of lawn areas, will apply.
W-4	Reuse Urban Runoff	Onsite reuse is not proposed.
Recycling and Waste Management		
RW-3	High Recycling/Zero Waste (including Commercial Recycling)	Future residents would participate in City recycling and waste reduction programs, as applicable.

Sustainable Communities Strategy

Plan Bay Area, which includes a Sustainable Communities Strategy that links transportation and land use planning, grew out of SB 375, which requires each of California's 18 metropolitan areas to reduce GHG emissions from cars and light trucks. *Plan Bay Area* promotes compact, mixed-use commercial and residential development focused in PDAs that are walkable, bikeable, and close to mass transit, jobs, schools, shopping, and recreational opportunities.

The development assumptions in Plan Bay Area are based on the zoning and General Plan land use designations in affect at the time Plan Bay Area was developed. The Residential parcel is located with the Urban Service Area of Cupertino and is currently zoned and designated for residential development. Therefore, although the Residential parcel is not located in a PDA, the proposed development of 18 residences on the Residential parcel and associated land dedications and easements, which could be used in the future to expand or connect existing park facilities, does not conflict with the Sustainable Communities Strategy in Plan Bay Area development assumptions. For these reasons, the project would not be inconsistent with efforts to reduce GHG emissions from cars and light trucks contained in *Plan Bay Area*. **(Less Than Significant Impact)**

Bay Area 2010 Clean Air Plan

The 2010 CAP includes performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of greenhouse gases to 1990 levels by 2020 and 40 percent below 1990 levels by 2035. The 2010 CAP identifies a range of Transportation Control Measures, Land Use and Local Impacts Measures, and Energy and Climate Measures that make up the CAP's control strategy for emissions, including greenhouse gas emissions. As discussed in Section 4.3, Air Quality, the project is generally consistent with applicable control measures and the development of the project would not interfere with implementation of the 2010 CAP.

Cupertino Green Building Ordinance

The proposed project would be required to comply with the City's Green Building Ordinance, which requires new construction projects with more than nine single-family homes to achieve a GPR score of 50, LEED silver certification, or alternative standards at least equally as stringent approved by the City. The City's Green Building Ordinance incorporates the California Green Building Code, which is part of the state's overall strategy to reduce GHG emissions to 1990 levels by 2020. **(Less Than Significant Impact)**

4.7.4 Conclusion

The project would not generate net new greenhouse gas emissions above the threshold of 1,100 MT CO_2e per year or conflict with plans, policies or regulations for reducing GHG emissions. Therefore, the project would result in less than significant greenhouse gas emissions. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on two Phase I Environmental Site Assessment reports (*Cornerstone Earth Group*, April 2013), a Limited Phase II Environmental Site Assessment (*ENGEO*, March 2013), and a Characterization of Soil Beneath the Former Landfill (*ENGEO*, January 2014). Copies of these reports are included in Appendix F of this Initial Study.

4.8.1 Setting

4.8.1.1 *Existing Use*

42.4-acre Site

The 42.4-acre site (i.e., Residential, Corridor, and Park parcels) is undeveloped (refer to Figure 2.2-3). Residential uses are located north and east of the site, adjacent to the Residential parcel. Stevens Creek County Park is located west of the project site adjacent to the Residential, Corridor, and Park parcels. Stevens Canyon Road is also located west of the project adjacent to the Residential parcel. Undeveloped land (former McDonald-Dorsa Quarry) is located east of the site, adjacent to the Corridor and Park parcels. Fremont Older Open Space Preserve is located south of the site, adjacent to the Park parcel.

Offsite Dedications, Easements, and Land Trades

The land associated with the offsite dedications, easements, and land trades is undeveloped, except for the slender portion of an existing fairway on Deep Cliff Golf Course that is part of the proposed land trade (refer to Figure 2.2-3). Undeveloped land, recreational (Deep Cliff Golf Course), public park (Linda Vista Park, McClellan Ranch Preserve) and residential uses surround the land associated with the offsite dedications, easements, and land trades.

4.8.1.2 *Historic Use*

42.4-acre Site

Quarry Operations

The 42.4-acre site and easterly adjacent property were formerly part of the McDonald-Dorsa quarry and have historically been primarily undeveloped. Gravel mining operations historically occurred at the quarry. The quarry was developed by the Guy F. Atkinson Company to provide fill for the extension of the runways at Moffett Field. The entrance to the site on Stevens Canyon Road is a former haul road for the quarry. The haul road extended through the Residential parcel to a former bridge crossing of Stevens Creek. The bridge has been removed.

Landfill

An approximately one-acre portion of the Residential parcel located near the Stevens Canyon Road entrance operated as an unregistered landfill during the 1960s and 1970s. The landfill was used by the City for the disposal of construction debris, street sweepings, and green wastes. The City took lead responsibility for cleaning up and remediating the former landfill, and conducted a series of investigations to characterize its contents as well as its lateral and vertical extent. The Removal Action Workplan was approved by the County of Santa Clara, Department of Environmental Health (SCCDEH) and remediation activities commenced on September 15, 1998. Remediation involved excavation and offsite disposal of landfill materials, as well as environmental sampling and analysis to demonstrate completion of remedial activities. On September 8, 1999, a Final Removal Action Report was submitted to the SCCDEH, which stated that based on sampling data and field visual observations "the non-native material was successfully removed and that no further action is required by the City or any other party at the site." Subsequently, the SCCDEH provided approval to initiate site restoration work. The restoration work consisted of backfilling the excavation area to current site grades with clean imported fill.

Orchards

Portions of the Residential parcel were used for agricultural purposes (consisting of orchards and possibly vineyards) from at least the 1930s; remnants of a former orchard currently remain on the western portion of the Residential parcel.

Horse Stables

In the 1970s, horse stables were constructed on the northern portion of the Park parcel, south of Stevens Creek. The parking area for the stables was located on the southeastern portion of the Residential parcel, north of Stevens Creek. The horse stables and associated structures were removed by the early 1980s.

Offsite Dedications, Easements, and Land Trades

Except for the slender portion of an existing fairway on Deep Cliff Golf Course that is part of the proposed land trade, the land associated with the offsite dedications, easements, and land trades is formerly part of the McDonald-Dorsa quarry and has historically been primarily undeveloped. These areas consisted mainly of undeveloped land until the 1940s when quarry operations began. Activities at the quarry appear to have been discontinued by the early 1970s, and these areas have subsequently remained as undeveloped land.

4.8.1.3 *Possible Onsite Sources of Contamination*

42.4-acre Site

Database Records Search

City and County agency files were reviewed and a database search was completed to determine whether the project site was listed on any federal, state, local, historical, and/or brownfield databases as a known or suspected source of contamination, or a site that handles or stores hazardous materials. The project site is not listed on any of the regulatory agency databases searched. Refer to Appendix F for a list of databases searched.

Historic Uses

Chemical Use and Storage

No hazardous materials were observed on the 42.4-acre site at the time of the site visit completed as part of the Phase I ESA (refer to Appendix F), and no evidence (e.g., stained soil or stressed vegetation) of hazardous materials releases onto the site was readily apparent. Details regarding hazardous materials use by past site occupants (i.e., quarry and horse stables) were not available within the data sources reviewed during the preparation of the Phase I ESA; however, these uses are not typically associated with the significant use and storage of hazardous materials, except possibly fuel storage for quarry vehicles and machinery.

Agriculture

Portions of the Residential parcel were used for agricultural purposes for several decades. Pesticides such as DDT may have been applied to crops in the normal course of farming operations.

Landfill

An approximately one-acre portion of the Residential parcel located near the Stevens Canyon Road entrance operated as an unregistered landfill during the 1960s and 1970s. Approximately 25,000 tons of landfill debris and/or impacted soil/fill reportedly were removed and disposed offsite in 1998 and 1999. The remedial activities appear to have been conducted under SCCDEH oversight and reportedly included the collection of post-excavation confirmation soil samples to verify that the impacted material had been adequately removed. The Site Restoration Report concludes that "the former presence of the landfill should not constitute an environmental constraint to the development of this property for residential usage."[31] The reports containing details of the work completed and SCCDEH approval letters (or associated correspondence), however, were incomplete and/or not available from the data sources researched during completion of the Phase I ESA.

[31] Dames & Moore. Site Restoration Report, McDonald Dorsa Property Cupertino, California. November 22, 1999.

Fill Material

Six areas of fill were identified on the Residential parcel, and additional fill was identified within the former quarry floor area located on the Park parcel.[32] The fill locations on the Residential parcel generally correspond to the locations of the former landfill, quarry haul road, bridge at Stevens Creek, and parking area on the north side of Stevens Creek. The fill in the area of the former landfill is adequately documented; however, the other fill areas on the site have not been sampled. Therefore, the source and quality of the reported fill at these locations are not known.

Offsite Dedications, Easements, and Land Trades

Database Records Search

City and County agency files were reviewed and a database search was completed to determine whether the land associated with the offsite dedications, easements, and land trade is listed on any federal, state, local, historical, and/or brownfield databases as a known or suspected source of contamination, or a site that handles or stores hazardous materials. The land is not listed on any of the regulatory agency databases searched. Refer to Appendix F for a list of databases searched.

Historic Uses

Chemical Use and Storage

No hazardous materials were observed on the land associated with the offsite dedications, easements, and land trade at the time of the site visit completed as part of the Phase I ESA (refer to Appendix F), and no evidence (e.g., stained soil or stressed vegetation) of hazardous materials releases was readily apparent. Details regarding hazardous materials use by the past site occupant (i.e., McDonald-Dorsa quarry) were not available within the data sources reviewed during the preparation of the Phase I ESA; however, quarries are not typically associated with the significant use and storage of hazardous materials, except possibly fuel storage for quarry vehicles and machinery.

Fill Material

Several areas of fill (to depths of greater than 13 feet) are identified within the former quarry floor area.[33] The source and quality of the reported fill are not known.

4.8.1.4 *Possible Offsite Sources of Contamination*

Database Records Search

Based on the information contained in the agency database reports prepared for both the 42.4-acre site and the land associated with the offsite dedications, easements, and land trades, no reported

[32] Berlogar Geotechnical Consultants. Preliminary Geotechnical Investigation, Canyon Heights LLC Project, Stevens Canyon Road, Cupertino California. February 7, 2001.
[33] Ibid.

offsite spill incidents appear likely to significantly impact soil or ground water on or beneath the project site or the offsite land. The potential for impact is based on the types of reported incidents, the location of the reported incidents in relation to the site, and the assumed ground water flow direction.

4.8.1.5 *Wildfires*

As part of the Fire and Resource Assessment Program, the State of California Department of Forestry and Fire Protection (CalFIRE) prepared and published Fire Hazard Severity Zone Maps for the State of California, including Santa Clara County. There are two Fire Hazard Severity Zone Maps for Santa Clara County, one for the incorporated areas and another for the unincorporated areas of the county. The site (i.e., 42.4-acre site and land associated with the offsite dedications, easements, and land trades) and area surrounding the site within the City of Cupertino are mapped Non-Very High Fire Hazard Severity Zones (i.e., the site is not in a Very High Fire Hazard Severity Zone). The unincorporated area south of the site is mapped High Fire Hazard Severity Zones.

4.8.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	1,4
2. 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?	☐	☒	☐	☐	12,13,14, 15,16
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1,4
4. 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, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒	12,15,16

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
5. 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, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,4
6. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,4
7. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1,4
8. 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?	☐	☒	☐	☐	27,28

4.8.3 Discussion of Impacts

The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. Construction of the 18 single-family residences may include extending the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel as part of the project Development Agreement. The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict the use of these parcels to open space. The proposed project also includes several offsite components, including land dedications, trail and parking lot easements, and land trades. The offsite land dedications and trail and parking lot easements could allow for the future construction of trails.

The proposed project, as summarized above and defined in Section 3, Project Description, would not routinely transport, use, or dispose hazardous materials, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste, or interfere with an adopted emergency response plan or emergency evacuation plan. The 42.4-acre site and land associated with the offsite dedications, easements, and land trades are not located within the boundary of an airport land use plan, within two miles of a public airport or public use airport, or in the vicinity of a private airstrip, and are not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. For these reasons, the proposed project would not result in hazards and hazardous materials impacts associated with Checklist Questions 1, 3, 4, 5, 6 and 7, above. The

potential for the proposed project to result in hazards and hazardous materials impacts related to Checklist Questions 2 and 8 is discussed below.

4.8.3.1 *42.4-acre Site*

Pesticides

Approximately 1.3 acres in the southwestern corner of the Residential parcel were used as an orchard. Therefore, near-surface soils in the area of former orchard were sampled and tested to determine if residual levels of persistent pesticides (i.e., organochlorine pesticides) and/or elevated levels of arsenic remain. Organochlorine pesticide levels in the soil samples were non-detect with respect to laboratory reporting limits, and arsenic levels were within typical background concentrations (refer to Appendix F). For these reasons, onsite soil in the area of the former orchard is not expected to present a risk to future construction workers or occupants of the proposed residences. **(Less Than Significant Impact)**

Landfill Remediation

An approximately one-acre portion of the Residential parcel located near the Stevens Canyon Road entrance operated as an unregistered landfill during the 1960s and 1970s. Remediation of the onsite landfill was completed in the late 1990s and appears to have been conducted under SCCDEH oversight, however, the reports containing details of the work completed and SCCDEH approval letters (or associated correspondence) are incomplete and/or not available. Native soil in the area of the former landfill was sampled and analyzed in May 2013 to confirm that the landfill remediation completed in the late 1990s was appropriate and no further remedial actions will be required. The test results show that the soil beneath the fill does not appear to be impacted from past landfill practices. Until the SCCDEH and/or another regulatory agency issue a letter of concurrence that the landfill remedial and restoration activities are complete and no further work is required and that the site is acceptable for the proposed residential development, however, the possibility remains that the historic use of the site as an unregistered landfill could expose project construction workers or future occupants to harmful chemicals.

PD Impact HAZ-1: Although unlikely, the possibility remains that the historic use of the Residential parcel as an unregistered landfill could expose project construction workers or future occupants to harmful chemical compounds. **(Significant Impact)**.

Mitigation Measures: As a condition of approval, the proposed project shall implement the following measures to avoid exposing construction workers and future site occupants to hazardous materials in the area of the former landfill:

PD MM HAZ-1.1: Prior to issuance of a grading permit, applicant must obtain written approval from the SCCDEH and/or another regulatory agency indicating their concurrence that landfill remedial and restoration activities have been adequately completed and that no further work is required and that the site is acceptable for the proposed residential development.

Undocumented Fill Material

The fill in the area of the former landfill is adequately documented; however, the source and quality of the reported fill at other locations on the Residential parcel are not known. Additionally, based on the history of the Site, buried structures, wells, undocumented fill or debris may be encountered during site development activities. These materials may require special handling and disposal during site development.

PD Impact HAZ-2: The undocumented fill on the Residential parcel may be contaminated and/or hazardous materials may be encountered during project construction, possibly posing a risk to construction workers and future site occupants. **(Significant Impact)**

Mitigation Measures: As a condition of approval, the proposed project shall implement the following measures to avoid exposing construction workers and future site occupants to hazardous materials:

PD MM HAZ-2.1: Prior to issuance of a grading permit, a site management plan (SMP) shall be developed by the project applicant to establish management practices for handling undocumented fill and/or other materials/structures, if encountered. The SMP shall be reviewed and approved by the SCCDEH and/or other regulatory oversight agency overseeing closure/reuse of the former landfill. At a minimum, the SMP will include the following management practices for handling undocumented fill:

- All areas of undocumented fill shall be overexcavated in conformance with recommendations in the project geotechnical investigation. Prior to onsite reuse or offsite disposal, the undocumented fill shall be sampled and tested following the recommendations outlined in the Clean Fill Advisory prepared by the Department of Toxic Substances Control (DTSC) in October 2001.

- If testing reveals fill exceeds the screening levels for residential uses, then the fill shall be removed from the site and disposed at registered landfill facility licensed to accept the contaminated soil.

Wildland Fire Hazards

The project site is located near open space with woody vegetation, however, it is not within a designated Very High or High Fire Hazard Severity zone. Existing regulations that apply to the proposed residential development include building design and maintenance requirements in the City of Cupertino Building and Fire Codes. The proposed project will be reviewed by Santa Clara County Fire, the City's fire service provider, to ensure that all fire safety standards are met. Implementation of the requirements would reduce or avoid exposure of people or structures to a significant risk of loss, injury or death involving wildfires. **(Less Than Significant Impact)**

4.8.3.2 *Offsite Dedications, Easements, and Land Trades*

Undocumented Fill Material

Several areas of fill (to depths of greater than 13 feet) are identified within the former quarry floor area. While materials likely are from the local rock materials in the old quarry, the source and quality of the reported fill are not known and, therefore, it is possible that the fill material contains elevated levels of harmful chemical compounds. For this reason, it is possible future development and/or use of a trail through the former quarry floor could expose construction workers or trail users to harmful chemical compounds.

DA Impact HAZ-3: Undocumented fill on the quarry floor may be contaminated and/or hazardous materials may be encountered during trail construction within the areas of undocumented fill, posing a risk to construction workers and future trail users. **(Significant Impact)**

Program Mitigation and Avoidance Measures: The City's General Plan recognizes that hazardous materials are regulated under local, state, and federal regulations. Regulations that have been adopted for the purpose of avoiding or mitigating hazards from contaminated soils are enforced by several local and state agencies, including the Santa Clara County Department of Environmental Health, California Department of Toxic Substances Control and the Regional Water Quality Control Board. These agencies implement protective cleanup programs and standards. Several of these agencies also have adopted guidelines for screening risk levels of contaminants of concern. State of California Hazardous Waste Regulations include standards for contaminants in any materials to be transported offsite. Future trail construction would be subject to applicable regulations and oversight of one or more of these agencies, if contamination is encountered within the trail easements. **(Less Than Significant Impact with Program Mitigation)**

The following measures are included in the Development Agreement to avoid exposing construction workers and future trail users to hazardous materials:

DA MM HAZ-3.1: The trail easements selected by the City will avoid areas of known undocumented fill, if feasible.

DA MM HAZ-3.2: Prior to trail construction, a site management plan (SMP) shall be developed by the City to establish management practices for handling undocumented fill and/or other materials/structures, if encountered. The SMP shall be reviewed and approved by the SCCDEH and/or other regulatory oversight agency. At a minimum, the SMP will include the following management practices for handling undocumented fill:

- All areas of undocumented fill shall be overexcavated. Prior to onsite reuse or offsite disposal, the undocumented fill shall be sampled and tested following the recommendations outlined in the Clean Fill Advisory prepared by the Department of Toxic Substances Control (DTSC) in October 2001.

- If testing reveals fill exceeds the screening levels for residential uses, then the fill shall be removed from the site and disposed at registered landfill facility licensed to accept the contaminated soil.

4.8.4 Conclusion

PD Impact HAZ-1: The proposed project, with implementation of mitigation measure PD MM HAZ-1.1, would not expose construction workers or future residents to harmful chemical compounds possibly associated with the historic operation of an unregistered landfill on the Residential parcel. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact HAZ-2: The proposed project, with implementation of mitigation measures PD MM HAZ-2.1 – PD MM HAZ-2.3, would not expose construction workers or future residents to harmful compounds possibly occurring within the areas of undocumented fill on the Residential parcel. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact HAZ-3: Future trail construction through areas of undocumented fill on the former quarry floor, consistent with regulations and guidelines of local, state, and federal agencies and the measures included in the development agreement, would avoid exposing construction workers or future trail users to harmful chemical compounds. **(Less Than Significant Impact with Mitigation Incorporated)**

4.9 HYDROLOGY AND WATER QUALITY

The following discussion is based, in part, on the Preliminary C.3 Stormwater Management Plan (*Carlson, Barbee, & Gibson, Inc*., November 2013), the Stormwater Management Infrastructure Modeling (*Balance Hydrologics, Inc.*, November 2013) and the Hydrogeologic Assessment of Construction Dewatering (*Balance Hydrologics, Inc.*, April 2014) prepared for the project. These reports are included as Appendices G, H, and I of this Initial Study.

4.9.1 Setting

4.9.1.1 *Regulatory Setting*

Water Quality (Nonpoint Source Pollution Program)

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards, which for the Cupertino area is the San Francisco Regional Water Quality Control Board (RWQCB).

Statewide Construction General Permit

The SWRCB has implemented an NPDES Construction General Permit (CGP) for the State. Projects disturbing one acre or more of soil must obtain permit coverage under the CGP by filing a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) with the SWRCB prior to commencement of construction. The CGP, which took effect July 1, 2010, includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The proposed project disturbs more than one acre of soil and would, therefore, require permit coverage under the CGP.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirements

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide municipal stormwater permits with a regional permit for 77 Bay Area municipalities, including the City of Cupertino. Under provisions of the NPDES Municipal Permit, redevelopment projects that add and/or replace more than 10,000 square feet of impervious surface, or 5,000 square feet of uncovered parking area, are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Amendments to the MRP require all of the post-construction runoff to be treated by using Low Impact Development (LID) treatment controls, such as stormwater harvesting, infiltration, and bioretention.

Hydromodification Management Plan

In addition to water quality controls, the MRP has hydromodification controls, which are defined in the Hydromodification Management Plan (HMP). Hydromodification is a change in stormwater runoff characteristics from a watershed caused by changes in land use conditions (i.e. urbanization) that alter the natural cycling of water. Changes in land use conditions can cause runoff volumes and velocity to increase, which can decrease in natural vegetation, change river/creek bank grades, compact soil, and create new drainages. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, or if they drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds that are 65 percent or more impervious based on the HMP Applicability Map (November 2010). The proposed project is subject to the requirements of the HMP. [34]

City of Cupertino Municipal Code

Chapter 16.52 *Prevention of Flood Damage* of the City of Cupertino Municipal Code governs construction in Special Flood Hazard Areas (zone A, AO or A1-30 on FIRM maps) having special flood or flood-related erosion hazards. Under this regulation, the Director of Public Works reviews all development permits to determine that the permit requirements of this chapter have been satisfied, and that building sites are reasonably safe from flooding.

Chapter 9.18 *Stormwater Pollution Prevention and Watershed Protection* of the City of Cupertino Municipal Code outlines the City's minimum requirements designed to control the discharge of pollutants into the City of Cupertino's storm drain system and to assure that discharges from the City of Cupertino storm drain system comply with applicable provisions of the Federal Clean Water Act and NPDES Permit.

4.9.1.2 *Existing Conditions*

Hydrology and Drainage

Surface Water

The Residential parcel is located within the Lower Peninsula Watersheds, which consists of a 98-square-mile area of multiple small-creek watersheds including the Stevens Creek watershed.[35] Surface runoff from the Residential parcel is conveyed to Stevens Creek and ultimately the San Francisco Bay. The vegetated site is considered to be 100 percent pervious, with no significant pavement located within the Residential parcel.

An existing outfall to Stevens Creek is located on the Corridor parcel. Stormwater runoff from Stevens Canyon Road and approximately 28 acres west of the Residential parcel across Stevens

[34] Santa Clara Valley Urban Runoff Pollution Prevention Program. *Hydromodification Management (HM) Applicability Map City of Cupertino.* November 2010. Available at: <http://www.scvurppp-w2k.com/HMP_app_maps/Cupertino_HMP_Map.pdf>

[35] Santa Clara Valley Water District. "West Valley". Accessed August 20, 2013. <http://www.valleywater.org/services/LowerPeninsula.aspx>.

Canyon Road is currently conveyed through the Residential parcel in an 18-inch storm drain line to the existing outfall.

Groundwater

The Residential parcel is located in the Santa Clara Valley Groundwater Basin between the Diablo Mountains to the east and the Santa Cruz Mountains to the west. The Santa Clara Valley Groundwater Basin is filled by valley floor alluvium and the Santa Clara Formation. The depth to groundwater on the Residential parcel ranges from 24 to 40.5 feet below the ground surface on the Residential parcel.[36] Fluctuations in groundwater levels may occur daily, seasonally, and over a period of years because of precipitation and other factors, including the water levels in adjacent creeks/culverts.

Flooding

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The Federal Emergency Management Agency (FEMA) manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one in one hundred (one percent) chance of being flooded in any one year based on historical data.

According to the FEMA FIRM, the Corridor parcel is located in the 100- year flood hazard zone. The Residential and Park parcels are not located within the 100-year flood hazard zone. The Residential and Park parcels are located in Zone X, which is defined as areas of 0.2 percent annual chance flood. [37]

Other Inundation Hazards

Dam Failure

The Association of Bay Area Governments (ABAG) compiles the dam failure inundation hazard maps submitted to the State Office of Emergency Services by dam owners throughout the Bay Area. The City of Cupertino has also prepared the Stevens Creek Dam Plan to deal with the potential failure of Stevens Creek Dam.[38] Portions of the Corridor parcel and Park parcel are located within a dam failure inundation hazard area of Stevens Creek Dam. The Residential parcel is not located within a dam failure inundation hazard area.[39]

[36] Engeo, *Geotechnical Feasibility Report*, January 17, 2014.
[37] Federal Emergency Management Agency, Community Parcel Number 06085C0212H, May 19, 2009.
[38] The Stevens Creek Dam Plan is available on the City's website: http://www.cupertino.org/index.aspx?page=1210
[39] Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Cupertino.* Map. October 20, 2003. Available at: <http://www.abag.ca.gov/cgi-bin/pickdamx.pl>

Sea Level Rise

The project site is located at an elevation of approximately 450 feet above mean sea level, and is not within a shoreline area vulnerable to projected sea level rise from global climate change of up to 55 inches.[40]

Seiches, Tsunamis, and Mudflows

A seiche is an oscillation of the surface of a lake or landlocked area varying in period from a few minutes to several hours. A seiche occurring at Stevens Creek Reservoir, approximately one mile southwest, would not affect the project site.

A tsunami or tidal wave is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site does not lie within a tsunami inundation hazard area.[41]

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. Mudflows are typically caused by brush loss followed by sustained heavy rains.[42] Though part of the project site is in a landslide hazard zone[43], conditions conducive to mudflows do not occur on or near the site. The upslope area to the northwest of the site across Stevens Canyon Road and within the drainage channel that historically extended through the project site is the only possible concern for mudflows. There is no evidence on the ground or in historical aerial photographs that this channel has spawned sizable mudflows or landslides.

4.9.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1, 18

[40] Bay Conservation and Development Commission. *Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline.* 2011. Page 28. Available at: <http://www.bcdc.ca.gov/BPA/LivingWithRisingBay.pdf>

[41] California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*, December 9, 2009. http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Documents/Tsunami_Inundation_SanFranciscoBayArea300.pdf

[42] National Flood Insurance Program, *Mudflows*, December 23, 2010, http://www.floodsmart.gov/floodsmart/pages/flooding_flood_risks/mud_flows.jsp.

[43] County of Santa Clara, *Santa Clara County Geologic Hazard Zones*, Map 26, October 26, 2012.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will 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 will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1
3. 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 will result in substantial erosion or siltation on-or offsite?	☐	☐	☒	☐	1, 18
4. 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 will result in flooding on-or offsite?	☐	☐	☒	☐	1, 18
5. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1, 18
6. Otherwise substantially degrade water quality?	☐	☐	☒	☐	1
7. 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?	☐	☐	☒	☐	1,23
8. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☒	☐	1,23
9. 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?	☐	☐	☒	☐	24
10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐	1

4.9.3 Discussion of Impacts

The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. Construction of the 18 single-family residences may include extending the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel as part of the project Development Agreement. The General Plan amendments and rezonings. For these reasons, the discussion below focuses on the hydrology and water quality impacts that could result from the construction of 18 single-family residences on the Residential parcel. The proposed project also includes several offsite components, including land dedications, trail and parking lot easements, and a land trades. The offsite land dedications and trail and parking lot easements could allow for the future construction of trails and a parking lot to accommodate up to 12 parking spaces.

4.9.3.1 *42.4-acre Site*

Water Quality Impacts

Construction-Related Impacts

There is the potential for water quality impacts to occur during the proposed construction of 18 residences on the Residential parcel and construction of a trail along the Corridor parcel. Construction activities generate dust, litter, oil, and other pollutants that could contaminate site runoff. In addition, construction activities would increase the potential for erosion and sedimentation by disturbing and exposing underlying soil to the erosive forces of water and wind.

Standard Project Conditions: In conformance with the City of Cupertino's Municipal Code Chapter 9.18, the following standard measures to reduce construction-related water quality impacts to a less than significant level shall be implemented:

- The project shall implement construction BMPs to avoid impacts to surface water quality during construction, to the satisfaction of the Director of Public Works. Construction BMPs would include, but would not be limited to, the following measures:
  - Preclude non-stormwater discharges to the stormwater system.
  - Incorporate effective, site-specific Best Management Practices for erosion and sediment control during the construction period.
  - Cover soil, equipment, and supplies that could contribute to non-visible pollution prior to rainfall events or monitor runoff.
  - Perform monitoring of discharges to the stormwater system.

- The project shall prepare and submit an Interim Erosion and Sediment Control Plan to the City for review and approval. The Interim Erosion and Sediment Control Plan shall specify the following and the location of all the measures listed in the Interim Erosion and Sediment Control Plan shall be depicted on a site map:

- A delineation and brief description of the measures to be undertaken to retain sediment on the site, including, but not limited to, the designs and specifications or berms and sediment detention basins, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the surface runoff and erosion control measures to be implemented, including, but not limited to, types and methods of applying mulches, and designs and specifications for diverters, dikes and drains, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the vegetative measures to be undertaken, including, but not limited to, seeding methods, and type, location and extent of preexisting and undisturbed vegetation types, and a schedule for maintenance and upkeep.

Post-Construction Impacts

Runoff from the project site would contain pollution from the new residences and pavement. The project also would increase traffic and human activity on and around the site, generating pollutants and increasing dust, litter, and other contaminants that could be washed into the storm drain system. Runoff from the proposed residential development may contain increased oil and grease from parked vehicles, as well as sediment and chemicals (i.e., fertilizers and pesticides) from the landscaped areas.

Standard Project Conditions: In conformance with the City of Cupertino's Municipal Code Chapter 9.18, the project shall implement the following standard measures to reduce post-construction water quality impacts to a less than significant level:

- To protect groundwater from pollutant loading of urban runoff, BMPs which are primarily infiltration devices (such as infiltration trenches and infiltration basins) must meet, at a minimum, the following conditions:
  - Pollution prevention and source control BMPs shall be implemented to protect groundwater;
  - Use of infiltration BMPs cannot cause or contribute to degradation of groundwater;
  - Infiltration BMPs must be adequately maintained;
  - Vertical distance from the base of any infiltration device to the seasonal high groundwater mark must be at least 10 feet. In areas of highly porous soils and/or high groundwater table, BMPs shall be subject to a higher level of analysis (considering potential for pollutants such as onsite chemical use, level of pretreatment, similar factors); and,
  - Infiltration devices shall be located a minimum of 100 feet horizontally from any water supply wells.

- Best Management Practices (BMPs) shall be selected and designed to the satisfaction of the Director of Public Works in accordance with the requirements contained in the most recent versions of the following documents:

  - City of Cupertino Post-Construction BMP Section Matrix;
  - SCVURPPP "Guidance for Implementing Storm water Regulations for New and Redevelopment Projects;"
  - NPDES Municipal Storm water Discharge Permit issued to the City of Cupertino by the California Regional Water Quality Control Board, San Francisco Bay Region;
  - California BMP Handbooks;
  - Bay Area Stormwater Management Agencies Association (BASMAA) "Start at the Source" Design Guidance Manual;
  - BASMAA "Using Site Design Standards to Meet Development Standards for Storm water Quality – A Companion Document to Start at the Source;" and
  - City of Cupertino Planning Procedures Performance Standard.

- The applicant, the project arborist and landscape architect, shall work with the City and the SCVURPPP to select pest resistant plants to minimize pesticide use, as appropriate, and the plant selection will be reflected in the landscape plans.

- The project shall comply with Provision C.3 of NPDES Permit Number CAS612008, which provides enhanced performance standards for the management of storm water for new development.

- Prior to issuance of building and grading permits, each phase of development shall include provision for post-construction structural controls in the project design in compliance with the NPDES C.3 permit provisions, and shall include BMPs for reducing contamination in storm water runoff as permanent features of the project.

C.3 Stormwater Management Plan

The preliminary C.3 Stormwater Management Plan (SWMP) prepared for the proposed project is included as Appendix G of this Initial Study. The SWMP identifies a combination of bioretention and landscape treatment as the best methods to meet the C.3 requirements for the proposed project. Sizing of bioretention areas for the project was determined using the Simplified Sizing Approach, which uses four percent of the contributing impervious surface area as the size for the bioretention area. The measures identified in the SWMP are summarized as follows:

- Landscaped areas can be used as bioretention BMPs. Where applicable, adjacent roof, patio, and driveway runoff will be directed to landscaping and then to planter strips. A subdrain will be placed in these bioretention planters to connect to the storm drain system.
- A bioretention basin will be used to treat additional stormwater runoff not directed to the bioretention planters. Runoff from streets and driveways will enter the proposed storm drain system and outfall in the bioretention basin. Treated runoff will be pumped from the detention basin to tie into the existing storm drain outfall into Stevens Creek.
- Infiltration material in bioretention areas shall have a minimum infiltration rate of five inches per hour to meet the specifications of the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook.

- Abundant landscaping will be present throughout the project site to provide additional treatment. These areas qualify as Self-Treating and Self-Retaining Treatment.

BMP Maintenance

Proper operation and maintenance of stormwater management facilities will be the responsibility of the Parkside Trails Home Owners Association (HOA) in perpetuity. The HOA will be subject to an annual fee payable to the City of Cupertino to offset the cost of inspecting the site or verifying that the stormwater management facilities are being maintained. To maintain effectiveness, the following BMP maintenance measures shall be implemented by the HOA:

- Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall not be applied.
- Replace and amend plants and soils as necessary to ensure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the stormwater.
- Visually inspect for ponding water to ensure that filtration is occurring.
- After all major storm events remove trash, inspect drain pipes and bubble-up risers for obstructions and remove if necessary.
- Continue general landscape maintenance, including pruning and cleanup throughout the year.
- Irrigate throughout the dry season. Irrigation will be provided with sufficient quantity and frequency to allow plants to thrive.
- Excavate, clean, and/or replace filter media (sand, gravel, topsoil) to ensure adequate infiltration rates annually or as needed.

Given the substantial amount of proposed grading, the steep slopes that would exist on the Residential parcel upon project completion, the location of Stevens Creek and associated steelhead habitat immediately downslope of the Residential parcel, and possible trail construction immediately adjacent to Stevens Creek, the standard measures listed above may not be sufficient to ensure erosion and sedimentation does not occur during and after construction of the proposed residences and possible future trails.

PD/DA Impact HYD-1: Standard measures may not be sufficient to ensure erosion does not occur during and after construction of the proposed residences and possible future trails. **(Significant Impact)**

Program Mitigation and Avoidance Measures: Implementation of mitigation measures MM BIO-1.2, 1.3, 2.1 through 2.4 and 7.2 would avoid and reduce water quality impacts to aquatic habitats. In addition, the following measure is included in the Development Agreement to avoid and reduce water quality impacts during and after construction of the proposed residences and possible future trails to a less than significant level:

MM HYD-1.1: In conformance with the City of Cupertino's Municipal Code (Section 16.08.110 Interim Erosion and Sediment Control Plan), the project applicant shall prepare and submit an Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan to the City for review and approval to ensure the measures are acceptable and meet all applicable resource

agency standards. The purpose of the Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan is to stabilize the soil, to reduce raindrop impact, to reduce the velocity of surface runoff, to prevent erosion, and ensure revegetation success. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall include specific measures that specially target any slopes which drain to the creek. The Interim Erosion and Sediment Control Plan/Slope Stabilization and Revegetation Plan shall specify the following and the location of all the measures listed in the plan shall be depicted on a site map:

- A delineation and brief description of the measures to be undertaken to retain sediment on the site, including, but not limited to, the designs and specifications or berms and sediment detention basins, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the surface runoff and erosion control measures to be implemented, including, but not limited to, types and methods of applying mulches, and designs and specifications for diverters, dikes and drains, and a schedule for their maintenance and upkeep;
- A delineation and brief description of the vegetative measures to be undertaken, including, but not limited to, seeding methods, and type, location and extent of preexisting and undisturbed vegetation types, and a schedule for maintenance and upkeep.

4.9.3.2 *Groundwater Impacts*

The residential project would use water supplied by San José Water Company. Project water supply impacts are addressed in Section 4.17, Utilities and Service Systems.

The proposed residential construction includes corrective earthwork and grading at the base of the Residential parcel slopes along Stevens Creek (refer to Section 4.6, Geology and Soils) to stabilize the slopes. The corrective grading would occur below the groundwater elevation and, therefore, proposes a groundwater cut-off wall, dewatering, and possible temporary shoring during construction. The cut-off wall is essentially a two-foot wide trench located on the creek side of the excavation and grading area, which is backfilled with a bentonite slurry (or similar low permeability material) to reduce groundwater seepage into the excavated area and potential significant water losses from Stevens Creek.

A Hydrogeologic Assessment (*Balance Hydrologics*, April 2014) was completed to understand the existing hydrogeologic conditions at the site and the effect of the proposed cutoff wall, detwatering, and possible shoring (refer to Appendix I). The assessment included four steps, (1) determining groundwater flow using regional local and geologic data, (2) completing an onsite shallow groundwater aquifer test, (3) using the results from steps 1 and 2 to develop a basic groundwater flow model, (4) using the groundwater flow model to assess conditions with and without the proposed cutoff wall, detwatering, and possible shoring. The results of the assessment suggest that the proposed excavation with a properly constructed cutoff wall would limit flow to the excavated area from the broader alluvial aquifer and not substantially affect baseflow in Stevens Creek. A properly constructed cut-off wall would likely also contain project dewatering to the excavated area rather than drawing groundwater from the stream or riparian corridor. For these reasons, the proposed corrective slope stabilization earthwork and grading at the base of the Residential parcel slopes would not significantly impact groundwater or flows in Stevens Creek. **(Less Than Significant Impact)**

4.9.3.3 *Drainage and Runoff Impacts*

The following discussion of drainage and runoff impacts is divided into two categories, onsite and offsite stormwater runoff. As described in further detail below, onsite stormwater runoff volumes include both runoff from the adjacent residences on Ricardo Avenue and the runoff generated by the proposed residences. Offsite stormwater runoff includes that from Stevens Canyon Road and approximately 3028 acres west of the project site across Stevens Canyon Road is currently conveyed through the site in an 18-inch storm drain line to the existing outfall that discharges to Stevens Creek.

Onsite Stormwater Runoff

Development of the Residential parcel with 18 single-family residences would result in approximately three acres being covered in new impervious surface. The proposed design of the residential development minimizes the amount of impervious surfaces being added. The following design elements included in the project reduce the amount of impervious surface being added:

- Reduced street and sidewalk widths.
- Clustering buildings around courts.
- Low intensity development, large lot size, and extensive landscaping.

The remaining acreage on the Residential parcel would be covered with landscaped areas including lawns, shrubs, and trees. A comparison of pre- and post-project pervious and impervious surfaces on the Residential parcel is shown in Table 4.9-1. As discussed previously in Section 4.9.3.1, these landscaped areas, along with the bioretention basin and planters, provide filtration before stormwater enters the storm sewer system.

Table 4.9-1: Pervious and Impervious Surface Comparison

	Existing		Proposed		Increase/Decrease	
	Square Feet	%	Square Feet	%	Square Feet	%
Rooftops	0	0%	51,150	13.8%	+51,150	+13.8
Streets	0	0%	69,100	18.6%	+69,100	+18.6
Driveways/Parking	0	0%	3,650	1%	+3,650	+1%
Sidewalks, Patios, Paths, etc.	0	0%	6,750	1.8%	+6,750	+1.8%
Pervious Areas/ Landscaping	371,350	100%	240,700	64.8%	-130,650	-35.2%
Total	371,350	100%	371,350	100%	0	0%
Impervious Surfaces	0	0%	130,650	35.2%	-130,650	+35.2%
Pervious Surfaces	371,350	100%	240,700	64.8%	+130,650	-35.2%
Total	371,350	100%	371,350	100%	0	0%

Stormwater runoff from the existing residences on Ricardo Avenue and adjacent to the north boundary of the Residential parcel current sheetflows onto the project site. The proposed onsite stormwater management controls (i.e., bioretention basin, landscaping, and planter boxes) have been sized to provide stormwater quality and hydromodification control for the runoff from the existing adjacent Ricardo Avenue residences and the proposed residential development, as documented by *Balance Hydrologics, Inc*. (Summary of Stormwater Management Infrastructure Modeling for the Parkside Trails Project, April 2014). Under existing conditions, peak stormwater runoff discharge volumes were determined to be 12.9 cubic feet/second (cfs) and 28.9 cfs for the 10-year and 100-year storm events, respectively. Under project conditions (i.e., with the addition of approximately three acres of impervious surface area and the proposed bioretention basin, pump system, landscaping, and planter boxes), peak discharge volumes would decrease to 11.4 cfs for a 10-year storm event and 24.0 cfs for a 100-year storm event with variable pumping of 0.9 cfs to 4.5 cfs. The proposed onsite stormwater management controls (i.e., bioretention basin, pump system, landscaping, and planter boxes) results in a lower flow than existing conditions. Therefore, changes in drainage patterns resulting from the proposed development of 18 single-family residences on the Residential parcel would not result in flooding on or offsite or otherwise adversely affect surface water runoff and are less than significant. **(Less Than Significant Impact)**

Offsite Stormwater Runoff

An existing outfall to Stevens Creek is located on the Corridor parcel. Under existing conditions, offsite stormwater runoff from Stevens Canyon Road and approximately 28 acres west of the project site across Stevens Canyon Road is conveyed through the Residential parcel in an 18-inch storm drain line to the existing outfall. The offsite stormwater runoff would continue to be routed through the Residential parcel to the existing outfall under the proposed project, with the following modifications:

- The 18-inch storm drain line would be rerouted through the Residential parcel within the proposed street.
- The storm drain system on Stevens Canyon Road would be improved to prevent localized flooding.

Compared to existing conditions, the modifications to the offsite stormwater drainage system described above would not substantially affect drainage patterns in the project area. **(Less Than Significant Impact)**

4.9.3.4 *Flooding Impacts*

The 18 single-family residences proposed by the project would be constructed on the Residential parcel. The Residential and Park parcels are not mapped within the 100-year flood hazard zone. Although the Corridor parcel is mapped within the 100-year flood hazard zone, possible future trail construction on the Corridor parcel would not impede or redirect flood flows. The project, therefore, would not place housing within the 100-year flood hazard zone, or impede or redirect flood flows or expose people to flood hazards. **(Less Than Significant Impact)**

4.9.3.5 *Other Inundation Hazards*

The Residential parcel is not mapped within the Stevens Creek Reservoir dam failure inundation zone. Therefore, the portion of the project site that would be developed with housing is not within a dam failure hazard zone. Although, portions of the Corridor and Park parcels are within the dam failure inundation zone, no development is proposed by the project on these parcels. The project site is not susceptible to inundation from seiches, tsunamis, or mudflows. **(Less Than Significant Impact)**

4.9.3.6 *Offsite Dedications, Easements, and Land Trades*

The offsite land dedications and trail and parking lot easements could allow for future trail and parking lot projects. In conformance with the City of Cupertino's Municipal Code Chapter 9.18, future trail and parking lot projects shall implement the standard project conditions listed above in Section 4.9.3.1 to reduce water quality impacts during construction and operation to a less than significant level. Future pedestrian and bicycle trail operation would not be expected to contribute substantial pollutant loading to surface water runoff. Since motor vehicles would not routinely use the future trails, if at all, significant amounts of automobile-related pollutants (oil, grease, and metals) would not be generated by the trails. Minor amounts of sediment (from atmospheric deposition) and litter could accumulate on the future trails. Even though the pollutant loading source is minimal, under current NPDES requirements, future trail projects would be required to treat runoff to the maximum extent practicable (MEP). In this case, treatment of the trail runoff to the MEP could be accomplished by standard trail design and construction methods. If not constructed properly, future trails could concentrate stormwater runoff flow, resulting in erosion and sedimentation downstream of the trails.

DA Impact HYD-1: If not constructed properly, future trails could concentrate stormwater runoff flow, resulting in erosion and sedimentation downstream of the trails. **(Significant Impact)**

Mitigation and Avoidance Measures: The following measures are included in the Development Agreement to avoid or reduce future trail impacts to runoff water quality to a less than significant level:

DA MM HYD-1.1: The trail shall be constructed so that runoff from the trail is not concentrated, but diffused into buffer area adjoining the trail.

DA MM HYD-1.2: To the maximum extent practicable, runoff from the trail shall not be directed into the creeks without prior treatment (e.g. adequate residence time in a grassy swale or detention area).

DA MM HYD-1.3: Swales and buffer areas adequate to treat runoff from the trail shall be clearly depicted in the final project design plans.

4.9.3 Conclusion

PD/DA Impact HYD-1: City for review and approval of the proposed erosion control measures will ensure all applicable resource agency standards are met and erosion does not occur during and after construction of the proposed residences and possible future trails. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact HYD-1: Future trails will be designed and constructed so that runoff from the trails is not concentrated, but diffused into buffer areas adjoining the trail and treated prior to being directed into creeks, which will avoid erosion and sedimentation. **(Less Than Significant Impact with Mitigation Incorporated)**

4.10 LAND USE

4.10.1 Setting

4.10.1.1 *General Plan and Zoning Designations*

42.4-Acre Site

The 42.4-acre site is located on Stevens Canyon Road at the southern edge of the City limits in an area developed with open space and residential uses (refer to Figure 2.2-3). The site is designated in the City's General Plan for *Very Low Density Residential (5-20 Acre Slope Density Formula)*. This land use designation is intended to protect environmentally sensitive areas from extensive development and to protect human life from hazards related to flood, fire and unstable terrain.

The project site is zoned *RHS (Residential Hillside)*. The purpose of the *RHS* zoning district is to regulate development consistent with the General Plan, to preserve the natural setting in the hillsides.

Offsite Dedications, Easements, and Land Trades

The offsite dedications, easements, and land trades includes four five parcels: 356-05-005 (quarry haul road), portions of 356-05-007 and 356-27-026 (quarry property trail and parking lot easements), portion of 356-05-008 (land trade Property 1), and portion of 356-05-009 (land trade Property 2). These parcels are located east of the project site at the southern edge of the City limits in an area developed with open space and residential uses (refer to Figure 2.2-3).

Quarry Haul Road and Land Trade Property 2

The quarry haul road and land trade Property 2 are both designated in the City's General Plan for *Parks and Open Space*. This land use designation is applied to land owned by the public and used for recreation. It is also applied to private open space and recreational lands.

The quarry haul road and land trade Property 2 are both zoned *FP-o (Private Recreation-outdoor)*. The FP zoning district is intended to encourage a diverse range of recreational development by private interests. At the same time, the use intensity of any site in the FP zone is determined by application of performance standards which ensure a compatible fit with the site's geographic and environmental setting.

Quarry Property Trail and Parking Lot Easements and Land Trade Property 1

The quarry property and land trade Property 1 are both designated in the City's General Plan for *Very Low Density Residential (5-20 Acre Slope Density Formula)*. This land use designation is intended to protect environmentally sensitive areas from extensive development and to protect human life from hazards related to flood, fire and unstable terrain.

The quarry property and land trade Property 1 are both zoned *RHS (Residential Hillside)*. The purpose of the *RHS* zoning district is to regulate development consistent with the General Plan, to preserve the natural setting in the hillsides.

4.10.1.2 *Onsite and Surrounding Uses*

42.4-Acre Site

The 42.4-acre site (i.e., Residential, Corridor, and Park parcels) is undeveloped (refer to Figure 2.2-3). Residential uses are located north and east of the site, adjacent to the Residential parcel. Stevens Creek County Park is located west of the project site adjacent to the Residential, Corridor, and Park parcels. Stevens Canyon Road is also located west of the project adjacent to the Residential parcel. Undeveloped land (former McDonald-Dorsa Quarry) is located east of the site, adjacent to the Corridor and Park parcels. Fremont Older Open Space Preserve is located south of the site, adjacent to the Park parcel.

Offsite Dedications, Easements, and Land Trades

The land associated with the offsite dedications, easements, and land trades is undeveloped, except for the slender portion of an existing fairway on Deep Cliff Golf Course that is part of the proposed land trade (refer to Figure 2.2-3). Undeveloped land, recreational (Deep Cliff Golf Course), public park (Linda Vista Park, McClellan Ranch Preserve) and residential uses surround the land associated with the offsite dedications, easements, and land trades.

4.10.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Physically divide an established community?	☐	☐	☐	☒	1
2. 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?	☐	☐	☒	☐	1,4,6
3. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1

4.10.3 Discussion of Impacts

The proposed project is not located in an area with an adopted habitat conservation plan or natural community conservation plan. Therefore, the project would not conflict with an applicable habitat conservation plan or natural community conservation plan, and this issue is not further discussed below.

4.10.3.1 *42.4-acre Site*

Residential Parcel

As shown on Figure 3.1-1, the proposed General Plan amendment on the Residential parcel would change the land use designation from *Very Low Density Residential (5-20 Acre Slope Density Formula)* to *Low Density Residential (1-5 Dwelling Units per Acre)*. As shown on Figure 3.2-1, the project would rezone the Residential parcel from *RHS (Residential Hillside)* to *P (R1-10) (Planned Development - Single-family Residential with semi-rural characteristics 10,000 square foot minimum lot area)*. As stated in the project description, the minimum setbacks allowed under the proposed base zoning (i.e., *R1-10*) would be maintained or exceeded. A Planned Development rezoning is proposed in order to include additional performance standards and regulations for the site, which is located at the City's rural edge, including the Building and Roof Forms, Colors, and Outdoor Lighting *Residential Hillside* zoning district design standards. In these ways the proposed development of 18 residences on the Residential parcel would be consistent with the proposed land use designation and zoning and compatible with the both the adjacent residential uses north and east and the open space uses to the south and west. The proposed residential development does not include large roadways or other features that would physically divide the community.

Hillsides Policies

The General Plan recognizes that Cupertino's hillsides are an irreplaceable resource shared by the entire Santa Clara Valley. The hillsides provide important habitat for wildlife, flood prevention for urbanized areas, vegetation that cleanses the air of pollutants, recreational opportunities, and visual relief from sprawling development. Two key Hillsides policies related to private hillside development are discussed below.

Policy 2-52: Rural Improvement Standards in Hillside Areas calls for rural improvement standards in hillside areas to preserve the rural character of hillsides. Strategies to implement this policy include a call for new construction to follow natural contours and avoid mass grading and to retain significant specimen trees and integrate them into the developed site. The Montebello foothills at the south and west boundaries of the valley floor are recognized as a scenic backdrop to the City.

Substantial grading and tree removal is required on the Residential parcel to remove fill materials and provide for slope stability near the Stevens Creek channel. While most of the 8.5 acres of the Residential parcel will be modified, the site is not in a hillside area of the Montebello foothills that is readily visible from the valley floor or provides a scenic backdrop to the City. As discussed above, site and building design will incorporate standards for hillside residential development.

Policy 2-53: Rural Improvement Standards in Hillside Areas calls for hillside developments to minimize visual and other impacts on adjacent public open space. A strategy to implement this policy is to remove private driveways and building sites as far as possible from property boundaries located next to public open space preserves and parks to enhance the natural open space character and protect plants and animals.

The proposed location of site access road is located to maximize sight distance at a curve on Stevens Canyon Road. The proposed building area will be separated from public open space (Stevens Creek County Park) by the Corridor and Park parcels. Views of the developed area from nearby open space property primarily will be from the County Park parking lot and the adjacent roadway, with vegetation on the Corridor and Park parcels providing screening from trails. Designation of the Corridor and Park parcels as open space in the General Plan will protect plants and animals in and area adjacent to public open space lands.

For these reasons, the proposed development of 18 residences on the Residential parcel would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental impacts or otherwise result in a significant land use impact. **(Less Than Significant Impact)**

Corridor and Park Parcels

As shown on Figure 3.1-1, the General Plan amendments on the Corridor and Park parcels would change the land use designation from *Very Low Density Residential (5-20 Acre Slope Density Formula)* to *Riparian Corridor* and *Parks and Open Space*, respectively. No development is proposed on the Corridor and Park parcels. The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict these parcels to open space uses, which would be compatible with the surrounding open space and residential uses. For these reasons, the proposed General Plan amendments and rezonings on the Corridor and Park parcels would not result in land use impacts. **(Less Than Significant Impact)**

4.10.3.2 *Offsite Dedications, Easements, and Land Trades*

Haul Road

As shown on Figure 2.2-3, a historic haul road connects McClellan Ranch Preserve and Linda Vista Park. The project proposes an irrevocable offer of dedication of this 1.56-acre parcel to the City. Should the City choose to accept the dedication, this parcel could be used by the City to construct a public trail connecting the two parks. No General Plan or zoning amendments are proposed on this parcel, at this time.[44] Trail construction on this parcel would be consistent with the existing land use designation and zoning (i.e., *Parks and Open Space*), compatible with the both the adjacent open space and residential uses, and would connect the community. For these reasons, the proposed

[44] If, in the future, the City decides to accept the offer of dedication, the zoning of the Haul Road parcel would be amended to *PR (Parks and Recreation)*, as the existing FP-o zoning is intended for privately owned open space while the *PR* zone is intended for publicly-owned open space.

dedication of the haul road and possible future trail construction on the property would not result in a significant land use impact. **(Less Than Significant Impact)**

Old Quarry Site Regional Trail and Parking Lot Easements

The project proposes irrevocable offers of dedication to the City for regional trail and parking lot easements on the old quarry site. The proposed trail and parking lot easements could further the City's trail planning efforts to connect the City's parks with Stevens Creek County Park to the west and Fremont Older Open Space Preserve to the southwest. No General Plan or zoning amendments are proposed on the old quarry site. Trail construction on this parcel would be consistent with the existing land use designation and zoning [i.e., *Very Low Density Residential (5-20 Acre Slope Density Formula)* and *RHS (Residential Hillside)*], compatible with the both the adjacent open space and residential uses, and would connect the community. For these reasons, the proposed regional trail and parking lot easement dedications on the old quarry site and possible future trail and parking lot construction would not result in a significant land use impact. **(Less Than Significant Impact)**

Land Trades

The two properties subject to the proposed land trades are labeled Property 1 and Property 2 on Figure 3.1-1. The land trades would clean up a land use inconsistency [i.e., a portion of an existing fairway on Deep Cliff Golf Course is designated *Very Low Density Residential (5-20 Acre Slope Density Formula)*] and would amend the General Plan land use designation along a segment of the Stevens Creek riparian corridor from *Parks and Open Space* to *Riparian Corridor*. The land trade would not facilitate development or otherwise result in changes that could result in a significant land use impact. **(Less Than Significant Impact)**

4.10.4 Conclusion

The proposed project is compatible with the existing residential and open space uses in the project and would not physically divide any established community. Implementation of the project, therefore, would not result in significant land use impacts. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Setting

Extractive resources known to exist in Santa Clara County include cement, sand, gravel, crushed rock, clay, and limestone. The County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Stevens Creek Quarry located approximately one mile southwest of the project site and the Lehigh Permanente Quarry located approximately one mile northwest of the project site as containing mineral deposits which are of regional significance as a source of construction aggregate materials. The McDonald-Dorsa quarry was formerly located immediately east of the project site, but the quarry ceased operations several decades ago and is not a designated site under SMARA.

4.11.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	1,4
2. 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?	☐	☐	☐	☒	1,4

The project site is located approximately one mile from two active surface mining sites, but would not result in the loss of availability of a known mineral resource.

4.11.3 Conclusion

The project would not impact the availability of known mineral resources. **(No Impact)**

4.12 NOISE

The following discussion is based on the Environmental Noise Assessment (*Illingworth & Rodkin, Inc.* April 2014) prepared for the project. A copy of this report is included as Appendix J of this Initial Study.

4.12.1 Setting

4.12.1.1 *Background Information*

Noise

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and the fluctuation in the noise level during exposure. Noise is measured on a "decibel" scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted units is known as the "A-weighted" decibel, or dBA. Further, sound is averaged over time and penalties are added to the average for noise that is generated during times that may be more disturbing to sensitive uses such as early morning, or late evening.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods, such as L_{eq}, DNL, or CNEL.[45] Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a jet is taking off from the Airport or when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on SR 85 or in the middle of the night).

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV) and another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. In this report, a PPV descriptor with units of millimeters per second (mm/sec) or inches per second (in/sec) is used to evaluate construction generated vibration for building damage and human complaints.

[45] L_{eq} stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. DNL stands for Day-Night Level and is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. CNEL stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related ground-borne vibration levels. The PPV descriptor is routinely used to measure and assess ground-borne vibration and almost exclusively used to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Additional information on the fundamentals of noise and vibration are included in Appendix J.

4.12.1.2 *Regulatory Framework*

City of Cupertino General Plan

The Health and Safety Element of the City's General Plan identifies noise and land use compatibility standards for various land uses. Goal L identifies the need to provide a compatible noise environment for existing and future land uses. Residential land uses are considered "normally acceptable" in noise environments of 60 dBA CNEL or less, and conditionally acceptable in noise environments between 60 and 70 dBA CNEL. Goal N of the noise section is to protect residential areas from intrusive non-traffic noise. Goal O of the noise section is to design buildings to diminish noise. Interior noise levels at residences are to be maintained at or below 45 dBA CNEL.

City of Cupertino Municipal Code

The City regulates noise within the community in Chapter 10.48 (Community Noise Control) of the Municipal Code. Construction noise is limited as follows:

A. Grading, construction and demolition activities shall be allowed to exceed the noise limits of Section 10.48.040 during daytime hours; provided, that the equipment utilized has high-quality noise muffler and abatement devices installed and in good condition, and the activity meets one of the following two criteria:
   1. No individual device produces a noise level more than 87 dBA at a distance of 25 feet; or
   2. The noise level on any nearby property does not exceed 80 dBA.

B. Notwithstanding Section 10.48.053A, it is a violation of this chapter to engage in any grading, street construction, demolition or underground utility work within 750 feet of a residential area on Saturdays, Sundays and holidays, and during the nighttime period, except as provided in Section 10.48.030.

C. Construction, other than street construction, is prohibited on holidays, except as provided in Sections 10.48.029 and 10.48.030.
D. Construction, other than street construction, is prohibited during nighttime periods unless it meets the nighttime standards of Section 10.48.040.
E. The use of helicopters as a part of a construction and/or demolition activity shall be restricted to between the hours of 9 AM and 6:30 PM Monday through Friday only, and prohibited on the weekends and holidays. The notice shall be given at least 24 hours in advance of said usage. In cases of emergency, the 24 hour period may be waived.

4.12.1.3 *Existing Conditions*

Residential Parcel

The Residential parcel is located along Stevens Canyon Road at the rural southern edge of the City. The Residential parcel is undeveloped and located adjacent to residential and open space uses. Noise monitoring was completed at the Residential parcel between January 14, 2014 and January 17, 2014 to quantify existing ambient noise levels. The noise monitoring survey included one long-term noise measurement along Stevens Canyon Road and three short-term measurements on and adjacent to the site representative of existing and proposed noise-sensitive residential land uses. The existing noise environment at the Residential parcel and in the vicinity results primarily from traffic on Stevens Canyon Road. CNEL noise levels on the project site at the time of the survey ranged from 63 dBA CNEL near Stevens Canyon Road to 45 dBA CNEL along the eastern project boundary. The time period between approximately 6:00 AM and approximately 3:00 PM typically had the highest maximum instantaneous and hourly average noise levels because of heavy truck traffic associated with Stevens Canyon Quarry.

Corridor Parcel, Park Parcel and Offsite Dedications, Easements, and Land Trades

Similar to the Residential parcel, the Corridor parcel, Park parcel and areas of the offsite dedications, easements, and land trades are located at the rural southern edge of the City and adjacent to residential and/or open space uses. They are not, however, located adjacent to Stevens Canyon Road and associated truck traffic. For these reasons, ambient noise levels at the Corridor parcel, Park parcel and areas of the offsite dedications are expected to be range between 45 dBA CNEL and 63 dBA CNEL.

The proposed project is not located within two miles of an airport or private airstrip, or within an airport land use plan.

4.12.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
1. 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?	☐	☒	☐	☐	21
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	21
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	21
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	21
5. 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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1

4.12.3 Discussion of Impacts

CEQA does not define what noise level increase would be considered substantial. Typically, project-generated noise level increases of three dBA CNEL or greater would be considered significant where exterior noise levels would exceed the normally acceptable noise level standard. Where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five dBA CNEL or greater would be considered significant. A substantial temporary noise level increase would occur where noise from construction activities exceeds 60 dBA L_{eq} and the ambient noise environment by at least five dBA L_{eq} at noise-sensitive uses in the project vicinity for a period of one year or more.

The 42.4-acre site and land associated with the offsite dedications, easements, and land trade are not located within the boundary of an airport land use plan or within two miles of a public or private airport. Therefore, the proposed project would not result in noise impacts associated with Checklist Questions 6 and 7, above. The potential for the proposed project to result in noise impacts related to Checklist Questions 1 through 4 is discussed below.

4.12.3.1 *42.4-acre Site*

The project proposes to subdivide the 42.4-acre site into three parcels, the Residential (8.5 acres), Corridor (4.1 acres), and Park (29.8 acres) parcels, change the General Plan land use designation and zoning on each of these parcels, and construct 18 single-family residences on the Residential parcel. Construction of the 18 single-family residences may include extending the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel as part of the project Development Agreement. The General Plan amendments and rezonings proposed on the Corridor and Park parcels would restrict the use of these parcels to open space. Future open space uses (e.g., trails) on the Corridor and Park parcels would not result in noise impacts and, therefore, noise impacts associated with Corridor and Park parcels are not further discussed.

Noise Impacts to the Project (Residential Parcel)

Future Exterior Noise Environment

Vehicular traffic along Stevens Canyon Road, particularly quarry trucks, would continue to be the predominant source of noise affecting the noise environment at the project site. The residential pads of Lots 1-3 (refer to Figure 3.2-2) would be graded down to approximately 12 to 14 feet below the elevation of adjacent sections of Stevens Canyon Road. Exterior noise levels at the outdoor use areas of Lots 1-3 are calculated to range from approximately 54 to 59 dBA CNEL assuming the acoustical shielding provided by the proposed six-foot solid landscape wall constructed at the top of the graded slope and adjacent to Stevens Canyon Road. The future exterior noise environment at outdoor use areas nearest Stevens Canyon Road would be considered "normally acceptable" for proposed residential land uses factoring in the acoustical shielding provided by the terrain and landscape wall. Outdoor use areas at the remaining residential lots (Lots 4-18) would also be considered "normally acceptable" due to additional attenuation with distance from Stevens Canyon Road and acoustical shielding provided by the intervening residential buildings. Therefore, the project would not result in a significant exterior noise impact. **(Less Than Significant Impact)**

Future Interior Noise Environment

Where there would be direct line-of-sight to the traffic, the CNEL at a distance of 70 feet from the center of Stevens Canyon Road is calculated to range from 63 to 64 dBA assuming a future one dBA CNEL noise increase. This noise level would be expected at the second-story facades of residential units proposed on Lots 1-3. The City of Cupertino requires that interior noise levels within new residential units be maintained at or below 45 dBA CNEL. In buildings of typical construction, with the windows partially open, interior noise levels are generally 15 dBA lower than exterior noise levels. With the windows closed, standard residential construction typically provides about 20 to 25 decibels of noise reduction. For example, a unit exposed to exterior noise levels of 64 dBA CNEL would be 49 dBA CNEL inside with the windows partially open and would range from 39 to 44 dBA CNEL with the windows shut. Interior noise levels would exceed the maximum allowable interior sound level of 45 dBA CNEL inside residential units on Lots 1-3 when windows are open for ventilation. Attaining the necessary noise

reduction from exterior to interior spaces is possible with proper wall construction techniques, the selection of proper windows and doors, and the incorporation of a forced-air mechanical ventilation system to allow the occupant the option of controlling noise by closing the windows.

Although not a significant noise impact, heavy truck traffic associated with Stevens Canyon Quarry begins at approximately 6:00 AM and produces typical maximum instantaneous noise levels of 78 dBA L_{max} measured 70 feet from the center of Stevens Canyon Road. These maximum instantaneous noise events would occur throughout the day during quarry operation, and would disturb the occupants of the residences proposed at Lots 1-3. Windows and doors of these building facades will be sound rated. The final determination of specific noise control treatments would be done during final design.

PD Impact NOI-1: Interior noise levels at the proposed residences on Lots 1-3 would exceed the City's standard of 45 dBA CNEL. **(Significant Impact)**

Mitigation Measures: The project proposes to implement the following mitigation measures to incorporate ventilation systems and noise attenuation to reduce to 45 dBA CNEL or less and reduce instantaneous interior noise levels at the proposed residences resulting from truck passbys:

PD MM NOI-1.1: Require a suitable form of forced-air mechanical ventilation, as determined by the local building official, for the residences proposed on Lots 1-3, so that windows could be kept closed at the occupant's discretion to control noise and achieve the 45 dBA CNEL interior noise standard.

PD MM NOI-1.2: Confirm the final specifications for noise insulation treatments for all west, north, and south facing facades of the residences proposed at Lots 1-3 during final design of the project. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans and approved prior to issuance of a building permit.

- Maximum instantaneous noise levels resulting from quarry truck passbys will be reduced indoors to meet a design guideline of 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. In order to meet this design guideline, the north, west, and south facing facades of the residences proposed on Lots 1-3 will be constructed to achieve an outdoor to indoor noise reduction of at least 30 dBA in bedrooms and 25 dBA in other rooms.

Noise and Vibration Impacts from the Project

Construction-Related Impacts

Construction Vibration

The construction of the proposed residences may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, etc.) are used. Construction activities

would include excavation, site preparation work, foundation work, and new building framing and finishing.

For structural damage, the California Department of Transportation uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV) for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec, PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec, PPV for historic buildings or buildings that are documented to be structurally weakened. No historic buildings or buildings that are documented to be structurally weakened adjoin the Residential parcel. Therefore, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

Construction activities such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity of the Residential parcel. Jackhammers typically generate vibration levels of 0.035 in/sec PPV and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Vibration levels from typical construction activities would be expected to be 0.2 in/sec PPV or less at a distance of 25 feet, below the 0.3 in/sec PPV significance threshold.

All of the residences on Ricardo Road are located over 25 feet from the Residential parcel property line, except for the residence on parcel 356-01-007, which is located 20 feet from the property line. At a distance of 20 feet, maximum vibration levels could reach 0.27 in/sec PPV during project construction. This is below the 0.3 in/sec PPV significance threshold.

The nearest residences to the project site are located approximately 15 from the east Residential parcel property line. These residences are located in the Rancho Deep Cliff Homeowners Association. Maximum vibration levels at these three residences could exceed the 0.3 in/sec PPV significance threshold, if vibratory rollers are used within 20 feet of the residences along the east property line of the Residential parcel. Other construction activities along the east property line are not anticipated to exceed the vibration threshold.

PD Impact NOI-2 Project construction activities along the east property line of the Residential parcel could result in cosmetic damage to three residences, if no mitigation is implemented. **(Significant Impact)**

Mitigation Measures: The project proposes to implement the following mitigation measures to avoid or mitigate cosmetic damage to adjacent structures:

PD MM NOI-2.1: To avoid vibration impacts during construction, vibratory rollers will not be used within 20 feet of adjacent residences unless there is no other feasible option. If vibratory rollers must be used within 20 feet of adjacent residences, then the adjacent residences will be surveyed before and after project construction to document if cosmetic damage occurs.

PD MM NOI-2.2: If cosmetic damage occurs as a result of project construction, the damage will be repaired at the expense of the project applicant.

Construction Noise

Construction activities can generate high noise levels, especially during the construction of project infrastructure when heavy equipment is used. The highest maximum instantaneous noise levels generated by project construction would typically range from about 90 to 95 dBA L_{max} at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are about 81 dBA to 88 dBA L_{eq} measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Construction generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities take place during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Typically, significant noise impacts do not result when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. A review of the construction information supplied by the project applicant shows that all exterior construction activities occurring during the demolition, mass grading, trenching, paving, and building exteriors phases would be completed within 12 months. Once construction moves indoors, minimal noise would be generated at offsite locations. Although construction activities would be completed in accordance with the provisions of the City of Cupertino Municipal Code, noise levels from some activities could exceed the quantitative noise limits contained in the Municipal Code (refer to Section 4.12.1.2) resulting in a significant impact.

PD Impact NOI-3: Noise levels during construction of the proposed residences could exceed the quantitative noise limits contained in the Chapter 10.48 of the Municipal Code. **(Significant Impact)**

Mitigation Measures: The project proposes to implement the following mitigation measure to reduce construction noise impacts to a less than significant level:

PD MM NOI-3.1: Develop a construction noise mitigation plan, including, but not limited to, the following available controls:

- Construct a minimum 8-foot high temporary noise barrier (e.g., solid wood fence made from one-inch plywood) to shield Ricardo Street residences from activities occurring on the project site.

- All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.

- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.

- Unnecessary idling of internal combustion engines shall be prohibited.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- Locate stationary noise sources as far from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) will be used. Any enclosure openings or venting will face away from sensitive receptors.

- Locate material stockpiles as well as maintenance/equipment staging and parking areas as far as feasible from residential receptors.

- Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.

- Designate a project liaison that will be responsible for responding to noise complaints during the construction phase. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person will take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generated excessive noise levels to the extent feasible.

- Require a reporting program that documents complaints received, actions taken to resolve problems, and effectiveness of these actions.

- Hold a preconstruction meeting with the job inspectors and the general contractor/onsite project manager to confirm that noise mitigation and practices (including construction hours, construction schedule, and noise coordinator) are completed.

Operational Impacts

Project-Generated Traffic

Existing traffic volumes along Stevens Canyon Road would have to double in order for the project to result in a noticeable (i.e., 3 dBA CNEL) noise increase above existing conditions. As discussed in Section 4.16, Transportation, the proposed 18 residences estimated to generate a total 215 daily trips with 22 trips occurring during both the AM and PM peak hours of traffic. Project-generated traffic noise level increases would be negligible when compared to the existing traffic noise levels attributable to existing automobiles and quarry trucks along Stevens Canyon Road. Traffic noise levels along Stevens Canyon Road would not measurably increase as a result of the project. **(Less Than Significant Impact)**

Stormwater Pump Station

As described in Section 3.0, *Project Description*, stormwater from the detention basin will be pumped to the existing outfall to Stevens Creek. The pumps would be located within the stormwater wet well, which would be located on the west side of the detention basin, between the road and detention basin. The wet well is planned to be an eight-foot diameter pre-cast concrete manhole that is approximately 10-feet deep. Two 20 horsepower, submersible stormwater pumps will be located in the wet well. The pumps and their associated piping would be installed below grade and submersed in water. The sound of the submersible pumps would be attenuated at the water/air interface because the acoustical characteristics of water and air are different given that the density of water is so much greater than the density of air. For these reasons, the noise from the stormwater pumps would not make a measureable contribution to overall noise levels at the nearest receptors. **(Less Than Significant Impact)**

Sanitary Sewer Lift Station

As described in Section 3.0, *Project Description*, the project would connect to the existing sanitary sewer line in Canyon Vista Court, which would require installing a lift station on the site. The lift station would be located near the road on the north side of the detention basin. The lift station wet well is planned to be a four-foot inside diameter pre-cast concrete or fiberglass structure that is approximately 8.6-feet deep. Two, one horsepower submersible pumps would be located in the wet well. The pumps and their associated piping would be installed below grade and submersed in water. The sound of the submersible pumps would be attenuated at the water/air interface because the acoustical characteristics of water and air are different given that the density of water is so much greater than the density of air. For these reasons, the noise from the sanitary sewer pumps would not make a measureable contribution to overall noise levels at the nearest receptors.

Consistent with the requirements of the Cupertino Sanitary Sewer District, the proposed project includes an onsite backup generator to power the lift station in the event of a power failure. The trailer-mounted diesel backup generator (Brand: Magnum; Model: MMG 25 A; KW: 23 KVA; Amp 240) would be tested weekly adjacent to the sanitary sewer lift station. According to manufacturer's noise data, the noise level from operation of the backup generator is 66 dBA at a distance of 23 feet.

This noise level would be similar to that of an auto or truck engine idling in the residential neighborhood. For this reason and those described above, the noise from the pumps and intermittent noise from the backup generator would not make a measureable contribution to overall noise levels at the nearest receptors. **(Less Than Significant Impact)**

4.12.3.2 *Offsite Dedication, Easements, and Land Trades*

The proposed project includes several offsite components, including dedication of the former quarry haul road, trail and parking lot easements through the old quarry site, and a possible land trade with Deep Cliff Golf Course. The offsite land dedications and trail and parking lot easements could allow for the future construction of trails and a parking lot. Future trail and parking lot construction and operation is not anticipated to result in significant noise impacts, because with the exception of the haul road, the offsite components are not generally near sensitive receptors. Trail and parking lot construction would adhere to the regulations in the City's Noise Ordinance and would not require extensive grading or use of heavy equipment and would not expose individual receptors to extended periods of construction noise. Trail construction along the former haul road connecting McClellan Ranch Preserve and Linda Vista Park, however, could result in a significant noise impact due to its location near existing residences.

DA Impact NOI-4: Noise levels during trail construction along the former haul road could exceed the quantitative noise limits contained in the Chapter 10.48 of the Municipal Code. **(Significant Impact)**

Program Mitigation and Avoidance Measures: The following measures are included in the Development Agreement to reduce noise impacts during construction of the haul road trail to a less than significant level:

DA MM NOI-4.1: All trail construction activities shall comply with the City of Cupertino Noise Ordinance.

DA MM NOI-4.2: All trail construction activities (including earthmoving and grading) shall only occur between the hours of 7:30 AM and 6:00 PM, Monday through Friday, and between the hours of 9:00 AM and 5:00 PM on Saturday. Construction shall not occur on Sunday or weekday holidays.

DA MM NOI-4.3: All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

4.12.4 Conclusion

PD Impact NOI-1: Interior noise levels at the proposed residences on Lots 1-3 would exceed the City's standard of 45 dBA CNEL. Implementation of mitigation measures MM NOI 1.1 and 1.2, as proposed by the project, would reduce interior noise levels to 45 dBA CNEL or less. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact NOI-2 Project construction activities along the east property line of the Residential parcel could result in cosmetic damage to three residences. Implementation of mitigation measures PD MM NOI-2.1 through PD MM NOI-2.3 would avoid or reduce the impact to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

PD Impact NOI-3: Noise levels during residential construction could exceed the quantitative noise limits contained in the Municipal Code. Implementation of the reasonable and feasible controls outlined above under PD MM NOI-3.1 would reduce construction noise levels five to 10 dBA and below the quantitative noise limits contained in the Municipal Code. **(Less Than Significant Impact with Mitigation Incorporated)**

DA Impact NOI-4: Noise levels during trail construction along the former haul road could substantially increase at the adjacent residences on a temporary basis. Implementation of mitigation measures DA MM NOI-4.1 through DA MM NOI-4.3 would reduce this temporary substantial noise increase to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.13 POPULATION AND HOUSING

4.13.1 Setting

Based on information from the California Department of Finance, the City of Cupertino population was estimated to be approximately 59,620 in January 2013.[46] The average number of persons per household in Cupertino in 2010 was 2.87.[47]

Approximately 31,060 jobs were provided within the City of Cupertino's Sphere of Influence in 2005, and the Association of Bay Area Governments (ABAG) Projections 2009 shows a projected increase to 33,340 jobs by the year 2020.

The 42.4-acre site is designated and zoned for residential use.

4.13.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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)?	☐	☐	☒	☐	1
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1

[46] State of California, Department of Finance. *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2012 and 2013*. May 2013. Available at: <http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/view.php>

[47] U.S. Census Bureau. "American Fact Finder". *Profile of General Population and Housing Characteristics: 2010, for the City of Cupertino.* Accessed July 18, 2013. Available at: <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_AIAN_AIANDP1&prodType=table>

4.13.2.1 *Growth Inducement Impacts*

The project site is located within the incorporated limits of the City of Cupertino and the proposed development of the Residential Parcel on the project site and designation of the Corridor and Park parcels for park and open space uses would not result in an expansion of urban services or the pressure to expand beyond the City's existing Sphere of Influence.

The project site currently does not contain any residences. Approval of a Development Permit is requested to allocate 18 residential allocations to the Parkside Trails project.

The project proposes to develop the site with 18 new single-family residences. Conservatively using U.S. Census estimates of 2.87 residents per household in Cupertino, the project would result in a population increase of approximately 52 residents on the site.

The population growth associated with developing 18 new homes on the site would not induce significant unplanned growth in housing within the City. The proposed land dedications, trail and parking lot easements, and land trades included in the project would have no effect on population and housing. In addition, the land dedications and rezoning would ensure that future residential development is not allowed on the Corridor and Park parcels. **(Less Than Significant Impact)**

4.13.2.2 *Housing Displacement Impacts*

The project would not displace people or housing. **(No Impact)**

4.13.3 Conclusion

The project would not result in substantial growth inducement or impacts to existing housing supply. **(Less Than Significant Impact)**

4.14 PUBLIC SERVICES

4.14.1 Setting

4.14.1.1 *Fire Service*

Fire safety and protection is provided by the Santa Clara County Fire Department, which also serves unincorporated Santa Clara County and the communities of Campbell, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga.

The Santa Clara County Fire Department serves a total area of approximately 100 square miles and a population of over 226,000 persons. The Santa Clara County Fire Department has 17 fire stations, an administrative headquarters, a maintenance facility, five other support facilities, and more than 100 vehicles. The Department employs 283 personnel to provide fire suppression, emergency medical and fire marshal services, hazardous materials regulation and response, rescue and extrication, public education and fire investigation services. The Department's suppression force is also augmented by volunteer firefighters.[48]

There are three fire stations located in the City of Cupertino: 1) Cupertino Fire Station No. 1 is located at 20215 Stevens Creek Boulevard, 2) Monta Vista Fire Station No. 7 is located at 22620 Stevens Creek Boulevard, and 3) Seven Springs Fire Station No. 2 is located at 21000 Seven Springs Parkway. The Monta Vista Fire Station is located approximately one mile north of the project site and would be the first to respond to any emergencies.

4.14.1.2 *Police Service*

Public safety services are provided by the Santa Clara County Sheriff's Office. The Santa Clara County Sheriff's Office serves the communities of Cupertino, Los Altos Hills, Saratoga, and the unincorporated areas of the Santa Clara County. The Sheriff's Office serves a population of approximately 197,700 persons and has 1,429 sworn personnel. There are twenty-eight deputies allocated to the City of Cupertino.[49]

The Santa Clara County Sheriff's West Valley Division, which is located at 1601 South De Anza Boulevard, provides law enforcement services to the residents of Cupertino.

4.14.1.3 *Schools*

The project site is located within the Cupertino Union Elementary School District and the Fremont Union High School District. Students in the project area may attend Stevens Creek Elementary School, Kennedy Middle School, and Monta Vista High School.

[48] City of Cupertino. "Fire: Santa Clara County Fire Department About County Fire". Accessed December 17, 2013. Available at: < http://www.cupertino.org/index.aspx?page=365>
[49] City of Cupertino. "Sheriff's Office West Valley Division". Accessed December 17, 2013. Available at: <http://www.cupertino.org/index.aspx?page=364>

4.14.1.4 *Parks*

Residents of Cupertino are served by regional and community park facilities, including regional open space, community and neighborhood parks, playing fields and trails. Examples of regional facilities include Rancho San Antonio and Stevens Creek County Parks and Fremont Older Open Space Preserve managed by the Midpeninsula Open Space District.[50]

The City of Cupertino's neighborhood parks system serves the active and passive recreational needs of its residents. The City of Cupertino's parkland is comprised of 12 neighborhood parks and four special purpose parks (Memorial Park, McClellan Ranch Preserve, Blackberry Farm and Creekside Park).[51] The City's General Plan Park Acreage Policy (Policy 2-74) states that the City should provide parkland equal to a minimum of three acres for every 1,000 residents. In addition, Policy 2-75 states that the each household should be within a 0.5-mile walk of a neighborhood park or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Policy 2-75 further states that pedestrian links between parks shall be provided whenever possible. The nearest City owned park to the proposed residential development is McClellan Ranch Preserve, located approximately one mile northeast. Fremont Older Open Space Preserve is located less than one quarter mile south of the project site.

4.14.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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?	☐	☐	☒	☐	1, 4
Police Protection?	☐	☐	☒	☐	1, 4
Schools?	☐	☐	☒	☐	1, 4, 17
Parks?	☐	☐	☒	☐	1, 4
Other Public Facilities?	☐	☐	☒	☐	1, 4

[50] City of Cupertino. *General Plan 2000-2020*. Figure 2-H.
[51] City of Cupertino General Plan 2000-2020 and City of Cupertino. "City Parks". Accessed April 5, 2013. Available at: <http://www.cupertino.org/index.aspx?page=591>

4.14.2.1 *Fire and Police Services*

The project site is located within an area of Cupertino that is served by the Santa Clara County Fire Department and the Santa Clara County Sheriff's Office. The proposed residences would be constructed in conformance with the appropriate Fire and Building Codes to reduce fire risk. The City requires smoke alarms in new residential development to further reduce fire risk. Development of the proposed project would intensify the use of the project site in comparison to existing conditions, which may incrementally increase the number of calls for fire and police services, including medical calls. Additional service demands generated by the proposed project, however, would not require construction of additional fire or police facilities. **(Less Than Significant Impact)**

4.14.2.2 *Schools*

The project would allow development of 18 single-family residences that would generate approximately 13 elementary students and four high school students.[52]

The project site is located within the Cupertino Union School District and the Fremont Union High School District. Students in the project area may attend Stevens Creek Elementary School, Kennedy Middle School, and Monta Vista High School. The demand for housing in the Cupertino Union School District and in the Monta Vista High attendance area is very high. The number of students generated from the project is relatively small and would not result in substantial individual effects on school capacity.

In accordance with California Government Code Section 65996, the developer shall pay a school impact fee to the Cupertino Union Elementary School District and the Fremont Union High School District to offset the increased demands on school facilities caused by the proposed project. The School Impact Fee program is considered under state law as an acceptable method of offsetting a project's effect on the adequacy of school facilities, with the individual school districts responsible for implementing school facilities improvements.

The proposed project would generate new students in the local school districts. As described above, the school impact fees and property tax paid by the project would cover the cost of facility improvements and operating cost for the project-generated students. The project, therefore, would not result in a significant impact to school facilities. **(Less Than Significant Impact)**

4.14.2.3 *Parks*

The development of 18 residences on the site would incrementally increase the use of existing recreational facilities in the area. The proposed project shall be required to comply with the City's Municipal Code regarding parkland dedication and/or payment of in-lieu fees to reduce impacts to parks facilities in the City.

[52] Schoolhouse Services. *Enrollment and Fiscal Impact Analysis, Parkside Trails Project*. March 2013. Tables 1 & 2 (0.70 elementary and middle school students and 0.24 high school students per single-family and some condominium units).

Standard Project Condition: In conformance with standard practices in the City of Cupertino, the proposed project shall implement the following standard measure to reduce park impacts:

- The project shall comply with the Municipal Code requirements for parkland dedication and/or payment of in-lieu fees (Section 18.24.060).

The nearest City owned park to the proposed residences is McClellan Ranch Preserve, located approximately one mile northeast of the project site. This exceeds the 0.5 mile walking distance called for in General Plan Policy 2-75. The proposed residences are located approximately one-quarter mile from the Stevens Creek County Park, which would provide the residences with recreational opportunities. Additionally, the project proposes an irrevocable offer of dedication of a historic haul road comprising 1.56 acres to the City. This parcel connects Linda Vista Park to McClellan Ranch Preserve and could be used by the City to construct a public trail between the two, which is encouraged in General Plan Policy 2-75.

The project also includes land set asides that could be used to improve regional and city park facilities. The largest of these is the 29.8-acre Park parcel that constitutes 73 percent of the total land involved. This parcel is currently zoned *Residential Hillside*. Under the proposed project, this parcel would be rezoned to *OS, Open Space* and its General Plan land use designation would be changed to *Parks and Open Space*.[53] The purpose of this is to protect the open space on the parcel from future development.

The project would change the General Plan designation of a 4.1-acre parcel known as the Corridor parcel from *Very Low Residential* to *Riparian Corridor*. This parcel would also be rezoned to *OS, Open Space*. The purpose of this is to protect the riparian corridor on the parcel from future development.

With implementation of the City's parkland dedication requirements or payment of in-lieu fees, it is unlikely that the incremental increase in use from the proposed residential development would cause significant physical deterioration of existing park facilities or require construction of new facilities. The land set asides and dedications would allow for future expansion of regional parkland and city facilities, if accepted by the local agencies. **(Less Than Significant Impact)**

4.14.3 Conclusion

The proposed project, with the implementation of the above standard project condition, would not result in significant impacts to public services. **(Less Than Significant Impact)**

[53] If, in the future, the City or its designee decides to accept the offer of dedication, the zoning of the parcel would be amended to PR (Parks and Recreation), as the OS zone is intended for privately owned open space while the PR zone is intended for publicly-owned open space.

4.15 RECREATION

4.15.1 Setting

The City of Cupertino is served by approximately 162 acres of parkland, including neighborhood parks, community parks, and school playing fields. The Parks and Recreation Department manages leisure services facilities including Quinlan Community Center, Cupertino Sports Center, Monta Vista Recreation Center, Cupertino Senior Center, and Blackberry Farm.

The Department of Parks and Recreation is responsible for park planning and development, and a comprehensive leisure program for the City. The City's Policy 2-74, states that the City should provide parkland equal to a minimum of three acres for every 1,000 residents. Policy 2-75 states that the each household should be within a 0.5-mile walk of a neighborhood park or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Policy 2-75 further states that pedestrian links between parks shall be provided whenever possible. As discussed in Section 4.14, Public Services, the nearest City owned park to the proposed residential development is McClellan Ranch Preserve, located approximately one mile northeast.

Residents of Cupertino are also served by County and regional parks. Stevens Creek County Park is the closest county park to the project site. The 1,077-acre park is located approximately 2.2 miles south of the proposed residential development and includes Stevens Creek Reservoir. The Fremont Older Open Space Preserve, operated by Midpeninsula Regional Open Space District, consists of 739 acres and is located less than one-quarter mile from the project site.

4.15.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐	1, 4
2. 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?	☐	☐	☒	☐	1, 4

Future residents of the site would use existing recreational facilities in the area. The closest recreational facility to the proposed residential development is the Stevens Creek County Park, located approximately one-quarter mile to the south.

The project includes an irrevocable offer of dedication of the historic haul road (1.56 acres) to the City, which could be used to connect McClellan Ranch Preserve to Linda Vista Park. This would further the goals of General Plan policy 2-75 which calls for pedestrian links between parks wherever possible. The project would also create a 29.8-acre Park parcel and a 4.1-acre Corridor parcel, which would be rezoned to protect them from future development.

The redevelopment of the site with 18 residences would incrementally increase the use of existing recreational facilities in the area. The project's compliance with the City's parkland dedication/payment of in-lieu fees (refer to Section 4.14, Public Services) would offset recreational impacts. **(Less Than Significant Impact)**

4.15.3 Conclusion

The proposed project would not result in significant recreation impacts. **(Less Than Significant Impact)**

4.16 TRANSPORTATION

The following discussion is based, in part, on three focused traffic impact analyses (TIAs) prepared by *Fehr & Peers* in June 2012, March 2014 and May 2014. The June 2012 TIA evaluates intersection operations in the project area, the March 2014 TIA evaluates the sight distance requirements for the proposed driveway onto Stevens Canyon Road, and the May 2014 TIA evaluates pedestrian facilities in the project area. Copies of these reports are provided in Appendix K, L and M of this Initial Study, respectively.

4.16.1 Setting

4.16.1.1 *Existing Transportation Network*

Roadway Network

The roadway network serving the project site is described below.

Regional Access

Interstate 280 (I-280) is a north/south freeway that extends from US 101 in San Jose to I-80 in San Francisco. It is generally an east/west oriented eight-lane freeway within the City of Cupertino. I-280 provides access to the project site via an interchange with Foothill Expressway/Boulevard.

State Route 85 (SR 85) is oriented in a north/south direction with four mixed-flow lanes and two high occupancy vehicle (HOV) lanes. SR 85 provides access to the project site via an interchange at Stevens Creek Boulevard.

Local Access

Foothill Boulevard is a four-lane major collector in the vicinity of the project site. Bike lanes are provided on both sides of the street. Foothill Boulevard becomes Foothill Expressway north of I-280 and Stevens Canyon Road south of McClellan Road.

Stevens Canyon Road is a two-lane, north-south road extending from McClellan Road to its terminus near the Monte Bello Open Space Preserve. Stevens Canyon Road is the only road providing direct access to the proposed residences.

Stevens Creek Boulevard is a six-lane, east-west divided arterial. It extends from the western boundary of the City of Cupertino into the cities of San Jose and Santa Clara.

Bicycle and Pedestrian Facilities

Stevens Canyon Road is designated a Class III Bicycle Route by the City.[54] This road connects to Class II bicycle facilities on Stevens Creek Road/Foothill Boulevard, the Class III bike path on McClellan Road, and the Stevens Creek off-street bike path. Presently, there are no sidewalks serving the project site. A sidewalk begins on the northbound site of Stevens Canyon Road immediately north of its intersection with Miramonte Road, approximately 1,000 feet northwest of the project site.

Transit Service

The Santa Clara Valley Transportation Authority (VTA) operates bus service in Santa Clara County. The nearest bus stop to the project site is located at the intersection of Stevens Creek Boulevard and Foothill Boulevard. Bus Route 51 serves this stop and provides service between De Anza College and the Moffett Field/Ames Center. The hours of operation are from 6:30 AM to 7:00 PM with 20 to 60 minute headways on weekdays. Route 51 stops at the Mountain View Transit Center where riders can transfer onto Caltrain or light rail.

4.16.1.2 *Existing Traffic Conditions*

Stevens Canyon Road

Stevens Canyon Road is a designated truck route[55] and provides access for trucks serving Stevens Creek Quarry located south of the project site. Truck traffic was found to account for 15 percent of traffic in both directions on Stevens Canyon Road. Throughout an average weekday, roughly 3,600 vehicles drive on Stevens Canyon Road, which equates to approximately 540 trucks. On weekends, only one percent of traffic along Stevens Canyon Road is truck traffic.

Near the project site, the posted speed on Stevens Canyon Road is 35 miles per hour (mph) with an advisory speed of 25 mph on the curve south of the site. The majority of traffic on this stretch of the roadway travels between 25-30 miles per hour (mph) in the northbound direction and 30-35 mph in the southbound direction.

Study Intersections and Level of Service Standards

The only signalized intersection in the vicinity of the project site is the intersection of Stevens Creek Boulevard and Foothill Boulevard. This intersection was evaluated using level of service (LOS). Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-

[54] Bike paths (Class 1 facilities) are pathways, separate from roadways that are designated for use by bicycles. Often, these pathways also allow pedestrian access. Bike lanes (Class 2 facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class 3) are existing right-of-ways that accommodate bicycles but are not separate from the existing travel lanes. Routes are typically designated only with signs.

[55] According to the Federal Highway Administration, designated vehicle classes 6-12, or trucks with three or more load bearing axels, are defined as heavy vehicles.

flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The City of Cupertino level of service standard for signalized intersections is LOS D or better.

The intersection was evaluated during AM and PM peak traffic hours (6:30-9:30 AM and 4:00-7:00 PM, respectively). The intersection was found to operate at an acceptable LOS C- with an average delay of 32.9 seconds during the AM peak hour.[56] During the PM peak hour, the intersection operated at an acceptable LOS C with an average delay of 27.2 seconds.

4.16.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	1,4
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	1,4,19
3. 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?	☐	☐	☐	☒	1
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☒	☐	☐	1,4,19
5. Result in inadequate emergency access?	☐	☐	☐	☒	1,4

[56] The reported delay and corresponding level of service for signalized intersections represents the average delay for all approaches at the intersection. LOS calculations were conducted using the TRAFFIX level of service analysis software package.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐	1,4,19

4.16.2.1 *Transportation and Traffic Impacts-Residential Parcel*

LOS Thresholds of Significance

The project would have a significant adverse impact on traffic conditions at a signalized intersection in the City of Cupertino if for either peak hour:

- The level of service at the intersection degrades from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or F under project conditions, or
- The level of service at the intersection is an unacceptable LOS E or F under existing conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

Trip Generation and Future Traffic Conditions

Trip generation rates were based on the Institute of Transportation Engineers (ITE) Trip Generation guidelines. The proposed construction of 18 single-family residences would result in a total of 215 daily trips, including 22 AM peak hour and 22 PM peak hour trips. According to VTA TIA guidelines, a Congestion Management Program analysis would not be required due to the project generating fewer than 30 peak hour trips in either peak hour.

The directions trips use to approach and depart the project site have been estimated based on the locations of complementary land uses, existing travel patterns, and population distribution. Since there are only two directions for inbound and outbound traffic, 80 percent of the new traffic associated with the proposed project was assigned north of the project site along Stevens Canyon Road while 20 percent was assigned south of the project site. Peak hour project traffic was assigned to the roadway system based on these directions of approach and departure.

Based on this trip generation and assignment, future operation of the Stevens Creek Boulevard and Foothill Boulevard intersection was analyzed. In order to assume worst case conditions, 100 percent of the project traffic was assumed to travel to this intersection. Under existing plus project conditions, the intersection would continue to operate a LOS C- with a 32.9 second delay during the AM peak hour and LOS C with a 27.2 second delay during the PM peak hour. This is unchanged from existing conditions and is not a significant impact. **(Less Than Significant Impact)**

4.16.2.2 *Traffic Hazards Impacts-Residential Parcel*

One of the environmental checklist questions is would the project substantially increase hazards due to a design feature.

The operation of the project driveway was reviewed. Using the existing traffic volumes on Stevens Canyon Road and the trips generated by the proposed residential development, an evaluation of the driveway operations showed that the project driveway will operate at LOS B during both peak hours with an average vehicle delay of approximately 10 seconds per vehicle. Therefore, there are sufficient gaps in the opposing traffic to allow vehicles to turn in and out of the driveway and there will be minimal queuing of vehicles entering the site from Stevens Canyon Road.

The speed survey results collected by *Fehr & Peers* were used for a sight distance analysis of the proposed Stevens Canyon Road driveway. Based on the posted 35 mph speed limit, the design speed is approximately 40 mph, which equates to a stopping sight distance (SSD) of 300 feet and a corner sight distance (CSD) of 440 feet. SSD measures the distance required by the driver of a vehicle to stop when an object becomes visible and CSD measures the necessary distance of a driver waiting at a side street to see the approaching vehicle before completing their turn. Adequate sight lines optimize CSD and the ability of motorists to judge the relative position and speed of approach traffic. The proposed driveway (A Street) meets SSD requirements for both southbound and northbound vehicles traveling on Stevens Canyon Road. Therefore, cars travelling southbound on Stevens Canyon Road will have time to stop for car(s) waiting to turn into the project driveway.

The proposed intersection of Stevens Canyon Road and "A" Street does not meet the CSD requirements for southbound vehicles. As proposed, the CSD for southbound vehicles is 230 feet, which is less than the 440-foot CSD for the design speed on Stevens Canyon Road. All other approach CSDs meet design requirements.

PD Impact TRAN-1: The proposed intersection of Stevens Canyon Road and "A" Street does not meet Caltrans CSD sight distance standards for southbound vehicles, and could result in an increase in hazards due to a design feature. **(Significant Impact)**

Mitigation and Avoidance Measures: The following mitigation measures will be incorporated into the project to reduce traffic hazard impacts to a less than significant level.

PD MM TRAN-1.1: The trees and shrubbery to the west of the project driveway shall be cut back in order to meet the corner sight distance (CSD) requirements for vehicles turning out of the project driveway.

PD MM TRAN-1.2: One of the following options shall be included in the project to improve CSD for southbound vehicles. Both options assume MM TRAN-1.1 is implemented:

Option 1.2A – The sidewalk and parking aisle shall be relocated to the north side of "A" Street and the stop bar shall be relocated 12 feet from the south edge of "A" Street (see Figure 4.16-1).[57]

Option 1.2B – Parking shall be restricted for the initial 120 feet of "A" Street, the stop bar shall be relocated 12 feet from the west edge of the pavement, and the center stripe shall be relocated 17 feet from the west edge of the sidewalk (e.g., five-foot sidewalk and 12-foot lane) (see Figure 4.16-2).

Option 1.2A is preferred by the traffic engineer because it provides 10 additional feet of CSD, though both adequately mitigate the CSD deficiency. Option 1.2A results in a CSD for southbound vehicles of 550 feet and Option 1.2B results in a CSD of 540 feet. **(Less Than Significant Impact with Mitigation Incorporated)**

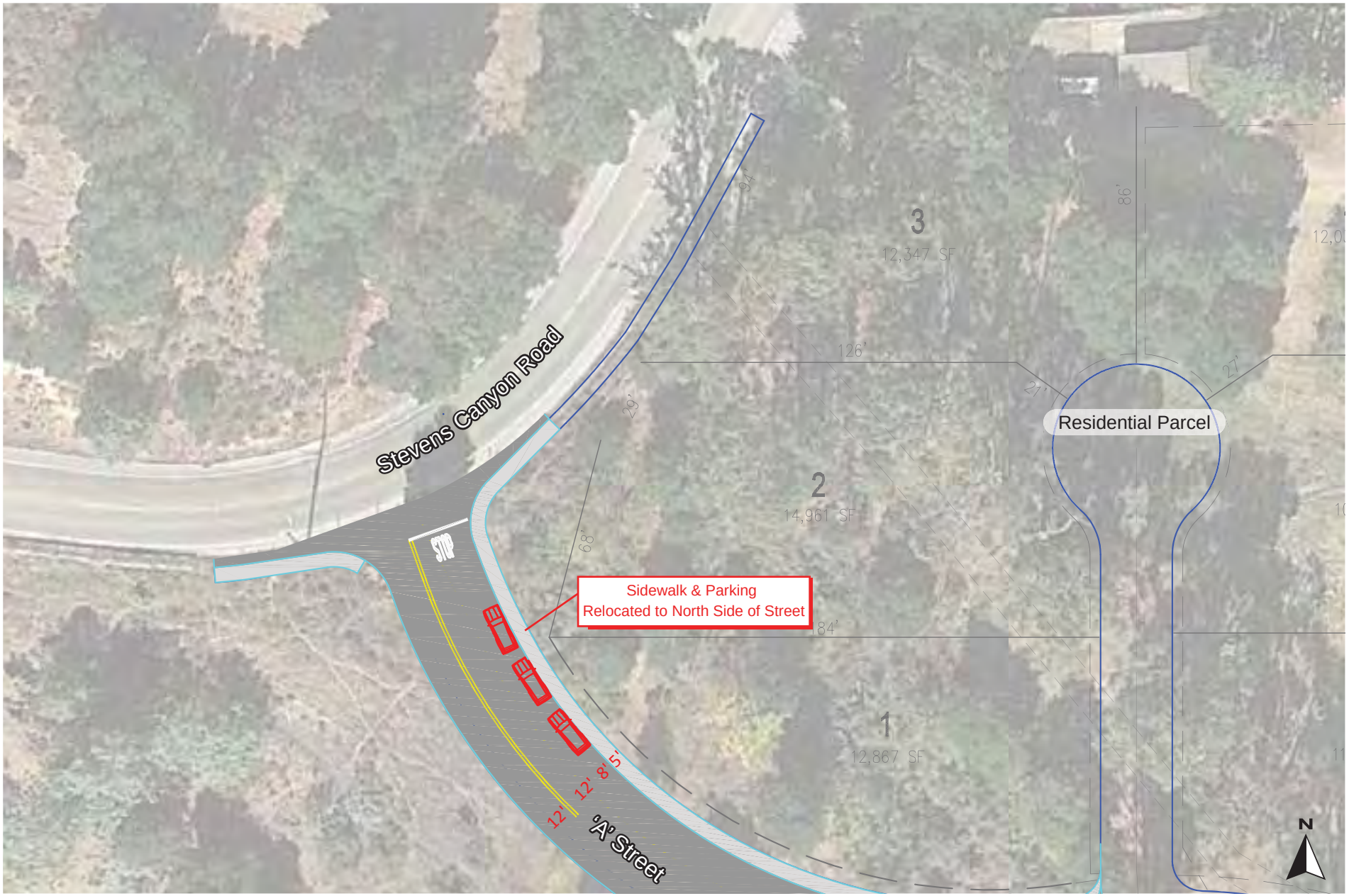
4.16.2.3 *Other Transportation Issues-Residential Parcel*

The proposed project would not result in changes in air traffic patterns or inadequate emergency access. The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Cupertino Pedestrian Transportation Guidelines identifies the following five significance criteria to determine if a development has a significant impact on pedestrian safety, pedestrian access to the area, or circulation through the area:

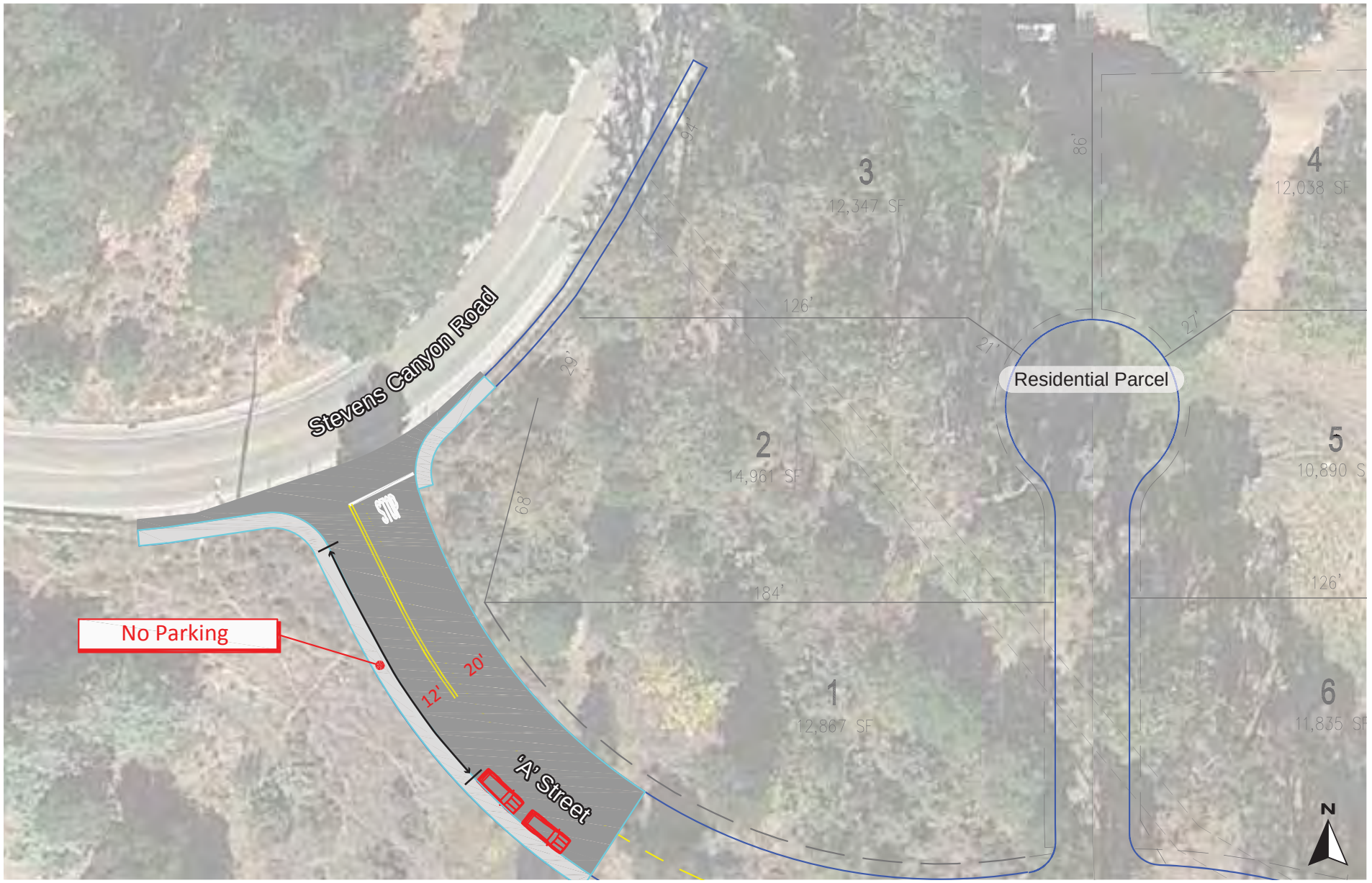
1. Consistency with the General Plan and Other Adopted Plans: Does the project conform to the policies and best practices as described in the City's General Plan or pertinent adopted plans?
2. Permanent Travel Pattern or Access Changes: Does the project eliminate any pedestrian facilities or otherwise alter pedestrian travel patterns due to any change to the roadway, sidewalks or pathway network (including but not limited to permanent roadway or sidewalk closures; elimination or relocation of sidewalks and crosswalks; elimination of office or historical easements or short-cuts used by pedestrians) or otherwise affect the routes pedestrians use to travel as directly as possible from origin to destination with no circuitous travel requirements?
3. Impacts on Existing Pedestrian Facilities: does the project affect the design of any existing pedestrian facility including but not limited to the width and/or design of sidewalks, roadway shoulders, bridges/overpasses or tunnels/underpasses?
4. Pedestrian Safety: Does the project provide new pedestrian facilities that conform to the accepted design standards and guidelines, as promulgated by responsible agencies such as the City of Cupertino, State of California, or AASHTO?
5. Impact on Pedestrian Crossings: Does the project impact the ability to easily and safely cross the street including the location and design of crosswalks; length of pedestrian phasing and signal cycle, pedestrian delay at signalized intersections; crossing difficulty caused by roadway widening, additional turn lanes, elimination of a median, provision for a free right-turn lanes, etc.?

[57] As described in Section 3.2.6.3, Improvements and Right-of-way Dedication, the project proposes a pedestrian access easement and improvements to maintain a pedestrian connection with Stevens Creek County Park through the Residential parcel. Depending on the location of the easement and improvements, relocating the sidewalk and parking isle may not be feasible.



Source: Fehr & Peers, April 2014.

SIGHT DISTANCE MITIGATION (OPTION 1.2A) FIGURE 4.16-1



Source: Fehr & Peers, April 2014.

SIGHT DISTANCE MITIGATION (OPTION 1.2B) FIGURE 4.16-2

An unofficial volunteer trail from Stevens Canyon Road to Stevens Creek County Park currently crosses through the northwest corner of the Residential parcel. The City of Cupertino Pedestrian Transportation Guidelines are not intended to require or maintain unofficial footpaths through private property. Also, the access point through the Residential parcel into Stevens Creek County Park is not recognized as an authorized entrance into the park. Therefore, elimination of the existing volunteer trail with development of the Residential parcel would not result in a significant pedestrian impact. While it is not required as a mitigation measure, the project proposes to maintain a pedestrian connection to Stevens Creek County Park through the Residential parcel via a pedestrian access easement over a portion of the private road down to where the existing volunteer trail connects to the Stevens Creek County Park property. In addition, the project will install street improvements along the Stevens Canyon Road project frontage, including sidewalks, which will contribute to pedestrian connectivity in the area.

The proposed residential development has a positive impact related to improving the existing pedestrian facilities and pedestrian safety on Stevens Canyon Road, and would not affect pedestrian crossings. Therefore, the proposed development of the Residential parcel will not conflict the Cupertino Pedestrian Transportation Guidelines, or other adopted pedestrian policies, plans, or programs. **(Less Than Significant Impact)**

4.16.2.4 *Offsite Dedications, Easements, and Land Trades*

Construction of the 18 single-family residences may include extending the existing sidewalk on Stevens Canyon Road from Miramonte Road to the Residential parcel as part of the project Development Agreement, along with several other offsite components, including land dedications, trail and parking lot easements, and land trades. Extension of the sidewalk from Miramonte Road to the Residential Parcel would improve pedestrian facilities in the project area. The land trades would not affect the transportation system. The land dedication (i.e., former quarry haul road) and trail and parking lot easements could allow for the future construction of a trail connecting McClellan Ranch Preserve to Linda Vista Park and the trail and parking lot easements could allow for the future construction of trails connecting Linda Vista Park, Stevens Creek County Park and Fremont Older Open Space Preserve. The trails would not be located on or adjacent to the public roadway system. Possible future trails would provide connections between existing park facilities and are not anticipated to generate substantial new peak hour traffic. Trail users who travel by vehicle to the parks would use existing parking facilities, and the possible 12-space parking lot proposed at Linda Vista Park. A new access driveway connecting to City streets is not envisioned. The trails would support non-vehicular travel in the project area and would not conflict with local policies related to bicycle or pedestrian facilities. **(Less Than Significant Impact)**

4.16.3 Conclusion

PD Impact TRAN-1: Caltrans sight distance standards would be met with the incorporation of mitigation measures MM TRAN-1.1 and MM TRAN-1.2 and the project would not result in a design feature hazard. **(Less Than Significant Impact with Mitigation Incorporated)**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 *Water*

Water service to the project site is supplied by the San Jose Water Company, which also maintains the water system. San Jose Water Company (SJWC) serves approximately 139 square miles of the Santa Clara Valley, including most of San Jose, most of Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County. SJWC relies on groundwater, imported treated water, and local surface water for its potable water supply. In 2010, SJWC received approximately 39 percent of its water supply from groundwater, 50 percent from imported treated water, and 12 percent from local surface water.[58] In 2010, SJWC delivered 133,066 acre-feet of water per year (AFY) which is expected to increase to 159,479 by 2035.

The project site is undeveloped. There are no water lines on the site. An eight-inch water line is located in Stevens Canyon Road along the project site frontage.

4.17.1.2 *Storm Drainage*

The City's storm drain system is made up of underground pipelines. These pipes carry surface runoff from streets to prevent flooding. Runoff (stormwater and runoff from landscape irrigation and other urban sources) enters the system at the grated catch basins found along the curb near street intersections. Water from these pipes is discharged, untreated, directly into City creeks.

An existing outfall to Stevens Creek is located on the Corridor parcel. Stormwater runoff from Stevens Canyon Road and approximately 28 acres west of the project site, across Stevens Canyon Road, is currently conveyed through the site in an 18-inch storm drain line to the existing outfall. There are two existing storm drain easements on the Residential parcel. One easement is for the existing 18-inch storm drain line and outfall on the project site. The other storm drain easement contains a 12-inch storm drain and is located in the westernmost corner of the Residential parcel.

4.17.1.3 *Wastewater/Sanitary Sewer System*

Sanitary sewer service in the project area is provided by the Cupertino Sanitary District. The Cupertino Sanitary District collects and transports wastewater to the San José-Santa Clara Regional Wastewater Facility (the Facility) located in north San Jose. The District purchases 7.85 million gallons per day of water treatment capacity from the plant.[59] Approximately five million gallons of wastewater a day is generated within the Cupertino Sanitary District and conveyed to the Facility.[60] The City is well below their allotted capacity at the Facility.

[58] San José Water Company, *2010 Urban Water Management Plan*, April 2011.
[59] City of Milpitas. "Agreement for Treatment Plant Capacity Transfer". 2009. Accessed: July 18. 2013. Available at: <http://www.ci.milpitas.ca.gov/_pdfs/council/2009/010609/item_17.pdf>
[60] Cupertino Sanitary District. 2009 Annual Report.

No wastewater is generated by the undeveloped project site. The eight-inch sanitary sewer line in Canyon Vista Court is the nearest sanitary sewer line to the Residential parcel.

4.17.1.4 *Solid Waste*

Commercial and residential garbage and recycling services in the project area are provided by the Los Altos Garbage Company. Solid waste collected from the City is delivered to Newby Island Sanitary Landfill. Many types of recyclable materials are also delivered to the Sunnyvale Materials Recovery Station (SMART Station) for recycling. As of May 2014, Newby Island Sanitary Landfill (NISL) had approximately 20.1 million cubic yards of capacity remaining.[61]

The City has a contract with Newby Island Landfill until the year 2023, or until the cumulative tonnage delivered equals 2.05 million tons. Since the City's contract with Newby Island, the City has delivered a total of approximately 1.4 million tons of waste to the landfill. The City generates approximately 31,500 tons of solid waste a year.[62]

4.17.2 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1
2. 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?	☐	☐	☒	☐	1
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	1, 25

[61] McGourty, Scott, NISL Environmental Manager. Personal Communication. May 19, 2014.
[62] The estimate annual tonnage of solid waste generated by the City is based on an average of 2009-2011. Source: King, Rick. Personal communications with NISL General Manager. February 2012.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
5. 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?	☐	☐	☒	☐	1
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	29
7. Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1

4.17.3 Discussion of Impacts

4.17.3.1 *Water Service and Supply*

SJWC's 2010 Urban Water Management Plan, adopted in April 2011, documents information on water supply, water usage, recycled water, conservation programs, water shortage planning, and water supply reliability over a 25 year planning period. This report concluded that SJWC will continue to have sufficient water supplies through 2035 based upon an annual demand increase of 0.4 percent. The proposed development of 18 residences on the project site would increase water demand by approximately 7,290 gallons of water per day, if no efficiency measures were incorporated into the project.[63] The project will be constructed to meet California Green Building Code standards, which include the incorporation of efficient plumbing fixtures and irrigation controls to reduce water use on the site. The project, therefore, would not substantially increase water demand to the extent that new entitlements and sources of water would be required. **(Less Than Significant Impact)**

4.17.3.2 *Storm Drainage*

The proposed development of 18 residences on the Residential parcel would increase the amount of pervious surfaces on the site. The project would install on onsite stormwater collection system and detention pond. As described in Section 4.9, Hydrology and Water Quality, the project would be required to incorporate Low Impact Development (LID) stormwater treatment measures and is subject to the requirements of the Hydromodification Plan; therefore, the project would not substantially increase the amount or rate of runoff from the project site or exceed the capacity of the City's existing storm drainage system.

[63] Based upon an estimated per capita rate of 135 gallons per capita per day for the five-year period of 2004-2008 in the 2010 San José Water Company Urban Water Management Plan and about three residents per single-family unit.

An existing outfall to Stevens Creek is located on the Corridor parcel. Stormwater runoff from Stevens Canyon Road and approximately 28 acres west of the project site across Stevens Canyon Road is currently conveyed through the site in an 18-inch storm drain line to the existing outfall. The proposed project includes offsite storm drainage improvements (i.e., additional grated catch basins along Stevens Canyon Road). Under the proposed project, the existing storm drain line would be relocated to the entrance road and would continue to connect directly to the existing outfall (refer to Figure 3.2-3). For these reasons and those stated above, the proposed project would not adversely impact the City's storm drainage system. **(Less Than Significant Impact)**

4.17.3.3 *Wastewater/Sanitary Sewer System*

As described previously, the City is well below its allotment for wastewater treatment at the Facility. The Cupertino Sanitary District, therefore, has adequate wastewater treatment capacity for the proposed project.

The proposed development of 18 residences is conservatively estimated to generate sewage of 6,197 gallons per day.[64] The project would connect to the existing sanitary sewer line in Canyon Vista Court. Connection to the existing sanitary sewer line would require installing a pump station on the site and conveying flows to a new sanitary sewer line in an easement on the adjacent property. The existing sanitary sewer system in the project area is anticipated to have adequate capacity to serve the project. **(Less Than Significant Impact)**

4.17.3.4 *Solid Waste*

The proposed project is estimated to generate approximately 80,351 pounds of solid waste per year.[65] Based on the project's estimated annual waste generation, the City's annual waste generation, and the City's remaining allocation at Newby Island Sanitary Landfill, there is sufficient capacity within the City's contract with Newby Island and at the landfill to serve the proposed project. **(Less Than Significant Impact)**

4.17.4 Conclusion

The utilities and service systems currently available are adequate to serve the proposed residential uses on the project site. **(Less Than Significant Impact)**

[64] Sewage generation is typically estimated to be about 85 percent of a site's water use.
[65] CalRecycle, *Residential Developments: Estimated Solid Waste Generation Rates*, January 16, 2013. Accessed December 24, 2013. Available at: <http://www.calrecycle.ca.gov/wastechar/WasteGenRates/Residential.htm> Based on a solid waste generation rate of 12.23 pounds per household per day.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. 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?	☐	☒	☐	☐	1, 4, 10, 22
2. 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)?	☐	☒	☐	☐	1, 4, 8, 22
3. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐	1, 4
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-29

4.18.1 Project Impacts

The proposed project, with implementation of the mitigation measures identified in Section 4.0 of this Initial Study, would not result in significantly degrade or impact the quality of the environment. As discussed specifically in Section 4.4, Biological Resources, with implementation of the measures incorporated into the project and the programmatic mitigation for possible future trail construction on the Corridor or Park parcels and offsite trail and parking lot easements and land dedications, the proposed project would not significantly impact sensitive habitat or wildlife. Similarly, with implementation of the measures incorporated into the project and the programmatic mitigation for possible future trail construction on the Corridor or Park parcels and offsite trail and parking lot easements and land dedications, the proposed project would not result in significant impacts to cultural resources. **(Less Than Significant Impacts with Mitigation)**

4.18.2 Cumulative Impacts

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not treated as significant for purposes of later environmental review and need not be discussed in detail.

The cumulative effects of planned development in Cupertino were previously addressed in the 2005 City of Cupertino General Plan Final EIR (State Clearinghouse #2002122061), although greenhouse gas emissions were not required to be evaluated under the CEQA Guidelines at the time of preparation of the EIR.

For each environmental issue, cumulative impacts may occur over different geographic areas. For example, emissions of regional air pollutants affect pollutant concentrations within the San Francisco Bay Area Air Basin, though the influence may be more substantial downwind of the sources. Cumulative aesthetics, hazards and noise impacts would be much more localized. The discussion below reflects the different geographic areas used to evaluate cumulative impacts based on physical constraints, regulatory limits, and service delivery areas.

Aesthetics: The cumulative setting for aesthetics impacts is limited to the viewshed in the project vicinity within the incorporated area of the City of Cupertino and unincorporated Santa Clara County along the Stevens Canyon Road corridor. The site is not visually prominent from the valley floor area of Cupertino. While the project would extend suburban residential development on a vacant portion of the property near the City's edge, there are no other known cumulative projects in the immediate area that would affect scenic views and result in a cumulative impact to aesthetic and visual resources. For these reasons, the project would not result in a cumulative aesthetic impact. **(Less Than Significant Cumulative Impact)**

Air Quality: Because a project's criteria air pollutant emissions would contribute to regional emissions of such pollutants, emissions contribute to cumulative impacts. The project-level thresholds for criteria pollutants identified in Section 4.3 are the basis for determining whether a project's individual impact is cumulatively considerable and would result in significant adverse air quality impacts to the region's existing air quality conditions. As disclosed in Section 4.3, the project would not result in a significant contribution to cumulative regional air emissions of criteria pollutants.

Toxic air contaminants (such as diesel particulates) and fine dust can have more localized health effects. The proposed project was analyzed for cumulative toxic air contaminants impacts associated with construction and operation of a stationary source (small generator) for a new sanitary sewer lift

station. The increased cancer risk and hazard index were below the significance thresholds described in Section 4.3 and the proposed project would not result in any cumulative impacts due to TAC emissions or fine dust in the project area. **(Less Than Significant Cumulative Impact)**

Biological Resources: The geographic scope of cumulative effects on biological resources includes the incorporated and unincorporated lands in the immediate vicinity and riparian and aquatic habitat in the Stevens Creek watershed. The project includes measures to minimize or offset impacts to sensitive habitats and special-status species, and erosion control measures and onsite water quality and stormwater controls to avoid substantial contribution of pollutants, including sediment, to Stevens Creek. The project also includes preconstruction surveys and the establishment of buffers to avoid impacts to individual nesting birds and special-status animals. Other individual projects in the City of Cupertino, especially those located along the Stevens Creek corridor, are assumed to implement similar measures based upon regulatory requirements of resources agencies and policies in the City's General Plan for resources protection. Through these measures, the project's contribution to habitats and special-status species impacts would not be cumulatively considerable or result in a new cumulative impact to these resources.

In conformance with the City's Tree Protection Ordinance, mature trees removed by the project, specifically native species, will be replaced. While there will be a temporal loss of trees in the vicinity, trees would be replaced at an overall ratio greater than one to one to off-set this effect. Overtime, the project would not result in a cumulative impact to tree resources within the City. **(Less Than Significant Cumulative Impact)**

Cultural Resources: The geographic area for cumulative impacts to cultural resources resulting from new development and redevelopment would extend throughout the City of Cupertino and the region. The project would not result in direct impacts to known cultural resources, including historic resources, and measures are included in the project to avoid substantial effects to any buried cultural resources if encountered during construction. For these reasons, the project would not contribute to cumulative impacts to historic or buried prehistoric resources from development in the Cupertino area. **(Less Than Significant Cumulative Impact)**

Geology and Seismicity: Geologic conditions are localized. Implementation of the proposed project, when considered with other cumulative development allowed under the City's General Plan, would not result in a cumulative geologic impact or exacerbate a regional cumulative geologic issue (e.g., such as building in a fault zone or a massive landslide). This is because individual developments would be subject to environmental review and permitting processes whereby the design and construction of structures will be reviewed for conformance with safety requirements under the California Building Code and local regulations. Project construction activities would disrupt soils, including some sloped areas. Implementation of local and State requirements for erosion and sediment control measures would reduce possible cumulative erosion impacts from construction to a less than significant level. **(Less Than Significant Cumulative Impact)**

Greenhouse Gas Emissions: Greenhouse gas emissions result in effects worldwide. The identified project-level thresholds for greenhouse gas emissions were developed such that a project-level

impact in Cupertino or the region would also be a cumulatively considerable impact. The project would not result in significant emissions of greenhouse gas emissions and, therefore, would not result in a cumulatively considerable greenhouse gas emissions impact. **(Less Than Significant Cumulative Impact)**

Hazards and Hazardous Materials: The geographic area for cumulative hazards and hazardous materials impacts for residential and open space projects are localized. The project would use or handle substantial quantities of regulated hazardous materials. In addition, implementation of local policies and State and Federal regulations for characterizing and remediating known accidental releases and conformance with regulations for reducing fire hazards in the City of Cupertino, would reduce and avoid cumulative hazards and hazardous materials impacts. For these reasons, the proposed project, in conjunction with other local development allowed under the City's General Plan, would not result in a cumulative hazards and hazardous materials impact. **(Less Than Significant Cumulative Impact)**

Hydrology and Water Quality: The geographic area for the assessment of cumulative hydrology and water quality impacts is the Stevens Creek watershed. Stevens Creek watershed extends through unincorporated Santa Clara County, Cupertino, Los Altos, Palo Alto, Sunnyvale and Mountain View to San Francisco Bay. In the urban setting of Cupertino, Los Altos, Palo Alto, Sunnyvale and Mountain View, stormwater drainage systems are provided and overseen by the local governments within their jurisdiction. On a local and regional basis, requirements for control of urban pollutants and for limiting hydromodification are included in the Municipal NPDES program to avoid or reduce cumulative regional impacts from modifications to local drainage and runoff. As described in Sections 4.4, Biological Resources and 4.9, Hydrology and Water Quality, the project proposes to conform to the requirements of the Municipal NPDES permit and City of Cupertino requirements for both hydromodification and stormwater controls.

As discussed in Section 4.9, development in Cupertino and adjacent cities are also required to comply with applicable NPDES permits and City regulations for stormwater and erosion controls during construction.

Compliance with applicable municipal and construction NPDES permits will reduce cumulative hydrology and water quality impacts in the Stevens Creek watershed to a less than significant level. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact related to hydrology and water quality. **(Less Than Significant Cumulative Impact)**

Land Use and Planning: The project includes amendments to the City's General Plan, however, it would not change the basic assumptions for residential development at the City's edge adjacent to unincorporated Santa Clara County. The land use discussion in Section 4.10 found that the project would not divide an established community or conflict with established plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the proposed project would not result in a cumulatively considerable contribution to cumulative impacts related to land use changes. **(Less Than Significant Cumulative Impact)**

Noise: Cumulative noise effects are localized adjacent to a project site or along roadways where project traffic travels. A noise report completed for the proposed residential development addressed the effects on adjacent residential areas. There are no pending projects in the vicinity of the Residential parcel that would add new noise sources affecting the adjacent residences. The increase in traffic on roadways from the proposed 18 residences would not double traffic volumes on local roadways or otherwise substantially increase traffic noise.

Future trail construction could generate temporary noise; however, with the exception of the area near the former quarry haul road connecting Linda Vista Park to the McClellan Ranch Preserve, these activities would not be located near sensitive receptors. The former quarry haul road is located between existing residences and the Deep Cliff Golf Course. Given major construction activities (such as construction of a new residential or commercial development) on the golf course or surrounding area is unlikely in the future, it is not anticipated that there would new, substantial construction or operational noise sources in the vicinity of the former quarry haul road at the time trail facilities are installed that would result in a cumulative noise impact on nearby residents.

For these reasons, the proposed project would not result in a cumulatively considerable contribution to cumulative impacts related to noise. **(Less Than Significant Cumulative Impact)**

Population and Housing: The geographic setting for population and housing covers the urban area of Cupertino and the regional assumptions for housing and employment growth in the area. The entire project site is designated for lower density residential development and the proposed project would increase residential development in the City by 18 single-family dwellings, an increase in population of approximately 52 residents. A portion of the project site (Corridor and Park parcels) would be shifted from future residential uses to open space uses. The project would not extend urban services beyond the City's urban service area. The project would be consistent with population and housing assumptions for the site in the City's General Plan and regional plans. For these reasons, the project would not contribute to a cumulative population and housing impact. **(Less Than Significant Cumulative Impact)**

Public Services and Recreation: Cumulative impacts to public services and recreation are considered in context with demand due to growth within the City and within the service areas of each service provider (e.g., Santa Clara County Sheriff, Cupertino Department of Parks and Recreation, Midpeninsula Regional Open Space District). The proposed development of 18 residences would, along with other development in the area, cumulatively increase the demand for public services (such as police, fire, schools, libraries, and parks and recreation). As noted in Section 4.14, development of the proposed residences could incrementally increase the number of calls for fire and police services, including medical calls. Additional service demands generated by the proposed project, however, would not require construction of new fire or police facilities, and the population growth is within the assumed growth for the City.

The City's Municipal Code requires subdivision developments to fund park improvements and dedicate land through compliance. Impact fees are also collected to provide for school facilities from individual residential development projects.

The project, through possible dedication of land for use as trails, could contribute to recreational opportunities and facilities in the area. The environmental effects of the trail connections are addressed throughout this Initial Study to the extent they are currently known and mitigation measures are included in the Development Agreement to reduce the physical effects of these potential facilities.

The increased use of County of Santa Clara Parks, as well as Midpeninsula Regional Open Space District, resulting from the 18 residences would be off-set through the payment of property taxes that ensure facilities are adequately maintained and sufficient to accommodate growth. As noted above, the increase in population on the Residential parcel is within planned growth for the City and potential new trails connections could provide for some demand for trail facilities. For these reasons, the project would not contribute to cumulative public services and recreation impacts. **(Less Than Significant Cumulative Impact)**

Transportation: The geographic area for the consideration of cumulative transportation impacts includes the roadways upon which project-generated traffic would travel. Projected traffic at General Plan buildout was previously assessed in the 2005 City of Cupertino General Plan EIR. A traffic impact analysis (TIA) completed for the proposed 18 residences evaluated the signalized intersection at Stevens Creek Boulevard and Foothill Boulevard. This is the only signalized intersection that would be affected by the project (i.e., the project would add 10 or more trips per lane of traffic). As shown in the TIA, project-generated traffic would not measurably affect operation of Stevens Creek Boulevard and Foothill Boulevard intersection. The intersection would continue to operate at LOS C- and C during the AM and PM peak hours with the addition of project-generated traffic, which is above the City's standard of LOS D or better. For these reasons, the project would not contribute to a cumulative transportation impact. **(Less Than Significant Cumulative Impact)**

Utilities and Service Systems: The geographic area for the consideration of utilities and service systems cumulative impacts is the service area for each utility. The proposed project would increase residential development within the service area of each utility by 18 single-family residences, an increase in population of approximately 52 residents. Increased demand upon utilities and service systems upon General Plan buildout was previously assessed in the 2005 City of Cupertino General Plan EIR. The project would be consistent with population and housing assumptions in the City's General Plan and regional plans and, therefore, the incremental increase in demand for utility and service systems (water, wastewater, stormwater, and solid waste) would not contribute to a cumulative population and housing impact. **(Less Than Significant Cumulative Impact)**

4.18.3 Short-term Environmental Goals vs. Long-term Environmental Goals

The project proposes to construct 18 residences with the City of Cupertino. The construction phase would require the use of nonrenewable construction material, such as concrete, metals, and plastics. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of buildings materials, site grading, and construction of the buildings. Heating and cooling, lighting, and electronics associated with the daily operation of the residences would use energy. Energy, in the form of fossil fuels, would be used to fuel vehicles traveling to and from the

project. In these ways, the project would result in an increase in demand upon nonrenewable resources; however, the project is required to comply with Residential Mandatory Measures of the California Green Building Code. These mandatory measures include water conserving fixtures and fittings, recycling and/or salvaging a minimum of 50 percent of the nonhazardous construction and demolition waste for reuse, and using VOC paints. Therefore, the project would not use resources in a wasteful or inefficient manner.

The project would not induce substantial job or population growth (refer to Section 4.13, Population and Housing) or result in a large or irretrievable commitment of resources. For these reasons, the project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. **(Less Than Significant Impact)**

4.18.4 Direct or Indirect Adverse Effects on Human Beings

Based on the analysis completed in Section 4.0 of this Initial Study, the project would not result in substantial direct or indirect adverse effects on human beings. The project, with the implementation of the measures identified in Section 4.0, would not expose people to substantial air pollutants, geological hazards, hazardous materials, flooding, or noise. **(Less Than Significant Impact)**

Checklist Sources

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10. Holman & Associates, Archaeological Consultants. *Archaeological Literature Review for the Parkside Trails Residential Project, Cupertino, Santa Clara County, California.* January 23, 2013.
11. ENGEO Inc. *Geotechnical Investigation Parkside Trails, Cupertino, CA.* January 17, 2014.
12. ENGEO Inc. *Phase I ESA, Parkside Trails. Cupertino, CA.* February 22, 2013.
13. ENGEO Inc. *Limited Phase II ESA, Parkside Trails. Cupertino, CA.* March 14, 2013.
14. ENGEO Inc. *Characterization of Soil Beneath Former Landfill, Parkside Trails, Cupertino, CA.* March 27, 2014.
15. Cornerstone Earth Group, Inc. *Phase I ESA, 44-acre Parkside Trails Property, Stevens Canyon Road, Cupertino CA.* April 29, 2013.
16. Cornerstone Earth Group, Inc. *Phase I ESA, Former McDonald-Dorsa Quarry, Cupertino CA.* April 29, 2013
17. Schoolhouse Services. *Enrollment and Fiscal Impact Analysis, Parkside Trails Project*. March 2013.
18. Carlson, Barbee, & Gibson, Inc. *C.3 Stormwater Management Plan*. November 13, 2013.
19. Fehr & Peers. *Focused Transportation Impacts Analysis, Parkside Trails, Cupertino, CA.* March 29, 2014.
20. Illingworth & Rodkin, Inc. *Parkside Trails Project Community Risk Assessment, Cupertino CA*. May 1, 2014.
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23. Federal Emergency Management Agency. *Flood Insurance Rate Map. Panel 06085C0212H*. May 18, 2009.
24. Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Cupertino.* Map. October 20, 2003. Available at: <http://www.abag.ca.gov/cgi-bin/pickdamx.pl>
25. San José Water Company. *2010 Urban Water Management Plan.* April 2011.
26. County of Santa Clara. "General Plan – Regional Parks & Scenic Highways Map". Available at: <http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Pages/GP.aspx>, Accessed May 21, 2014.
27. California Department of Forestry and Fire Protection, Fire and Resource Assessment Program. *Santa Clara County Very High Fire Hazard Severity Zones in LRA*. October 8, 2008.
28. California Department of Forestry and Fire Protection, Fire and Resource Assessment Program. *Santa Clara County Very High Fire Hazard Severity Zones in SRA*. November 6, 2007.
29. McGourty, Scott, NISL Environmental Manager. Personal Communication. May 19, 2014.

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Cupertino
Community Development Department
Aarti Shrivastava, Assistant City Manager/Community Development Director
Gary Chao, Assistant Community Development Director
Rebecca Tolentino, Senior Planner
Chad Mosley, Senior Civil Engineer
Winnie Pagan, Associate Civil Engineer
Gail Seeds, Park Restoration and Improvement Manager

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Nora Monette, Principal
Demetri Loukas, Project Manager
Zach Dill, Graphic Artist