

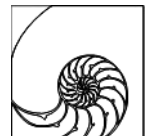
Roberts Ranch Project
Addendum to Boundary Creek Subdivision Project EIR
(As previously certified, November 2005)

Administrative Draft

April 2016

Prepared for:

Alameda County Planning Department
399 Elmhurst Street, #141
Hayward, CA 94544



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Executive Summary

SRE Development Company (the applicant) has submitted an application to develop a 21-unit single-family residential development on the same 8.49-acre site evaluated in the 2005 Recirculated Boundary Creek Subdivision Environmental Impact Report. The Boundary Creek Subdivision project was never developed and the site is currently vacant.

The Roberts Ranch Project proposes development of fewer lots on the site than the previously approved Boundary Creek Subdivision project, but otherwise maintains the primary elements. The major elements of this development project at 4524 Crow Canyon Place include:

- Development of a 21-unit single-family residential subdivision on 8.22 acres
- Provision of 101 vehicle parking spaces, including 42 garage spaces and 59 on-street spaces
- Inclusion of 187,998 square feet of Creek and Conservation Easement Area and two bioretention areas
- Construction of a bridge over Crow Creek to provide access to the development from Crow Canyon Place
- Approval of a modified Tentative Subdivision Map and an amended PD zoning to incorporate the proposed site plan

The Roberts Ranch Project would be required to implement the mitigation measures identified in the 2005 Recirculated Boundary Creek Subdivision Environmental Impact Report to avoid or reduce significant impacts. Mitigation measures have been recommended for the following environmental topic areas: aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology and water quality, noise, public services, recreation, transportation and traffic, and utilities. Some of these mitigation measures have been incorporated into the design of the Roberts Ranch Project (e.g., measures related to biological resources and hydrology and water quality), and others would be implemented upon project approval.

This California Environmental Quality Act Checklist demonstrates that the potential environmental effects of the proposed Project were adequately covered by the 2005 Recirculated Boundary Creek Subdivision Environmental Impact Report, such that an addendum to the 2005 Recirculated Boundary Creek Subdivision California Environmental Quality Act document is appropriate for the Roberts Ranch Project. Based on an examination of the analysis, findings, and conclusions of the 2005 Recirculated Boundary Creek Subdivision Environmental Impact Report, implementation of the Roberts Ranch Project would not substantially increase the severity of significant impacts identified in the previous Environmental Impact Report, nor would it result in new significant impacts that were not identified in the previous Environmental Impact Report. The Roberts Ranch Project would not result in significant off-site or cumulative environmental effects not previously discussed. No Supplemental or Subsequent Environmental Impact Report is required.

Initial Study Determination—to determine whether further CEQA review is required for development of the Roberts Ranch Project in Alameda County, California

The purpose of this evaluation is to determine whether a Subsequent or Supplemental Environmental Impact Report (EIR) is needed to fully assess and evaluate the impacts of the proposed Roberts Ranch Project (Project) in the Castro Valley area of unincorporated Alameda County, California. An earlier proposal to build a 28-unit single-family residential development on the same 8.49-acre site (i.e., the Boundary Creek Subdivision Project) was evaluated in the Boundary Creek Subdivision EIR, which was ultimately certified by the Alameda County Planning Commission in November 2005. As detailed below, an Addendum to the November 2005 EIR for the Boundary Creek Subdivision Project is the appropriate environmental document for the Project. No Supplemental or Subsequent EIR is required. This document constitutes the Addendum.

- 1. Project Title:** Roberts Ranch Project
- 2. Lead Agency Name and Address:** Alameda County Planning Department
399 Elmhurst Street, # 141
Hayward, CA 94544
- 3. Contact Person and Phone Number:** Sonia Urzua
510.670.5400
sonia.urzua@acgov.org
- 4. Project Location:** The Project is at 4524 Crow Canyon Place in the unincorporated area of Castro Valley in Alameda County, California. The site, which lies between Veronica Avenue and Crow Canyon Place, is an 8.22-acre vacant property, bordered by residential uses on the north, east, and west, and an undeveloped vegetated area to the south. The regional and Project site locations are graphically depicted in **Figure 1**.
- 5. Project Sponsor's Name and Address:** Mike Sullivan
SRE Development Company
901 Campisi Way, Suite 222
Campbell, CA 95008
408.819.0620
- 6. General Plan Designation:** The Project site is designated Single-Family Residential in the Castro Valley Plan.
- 7. Zoning:** The zoning designation for the site is Planned Development (PD) pursuant to the November 2005 approval of the previous Boundary Creek Subdivision project (Previously Approved Project).

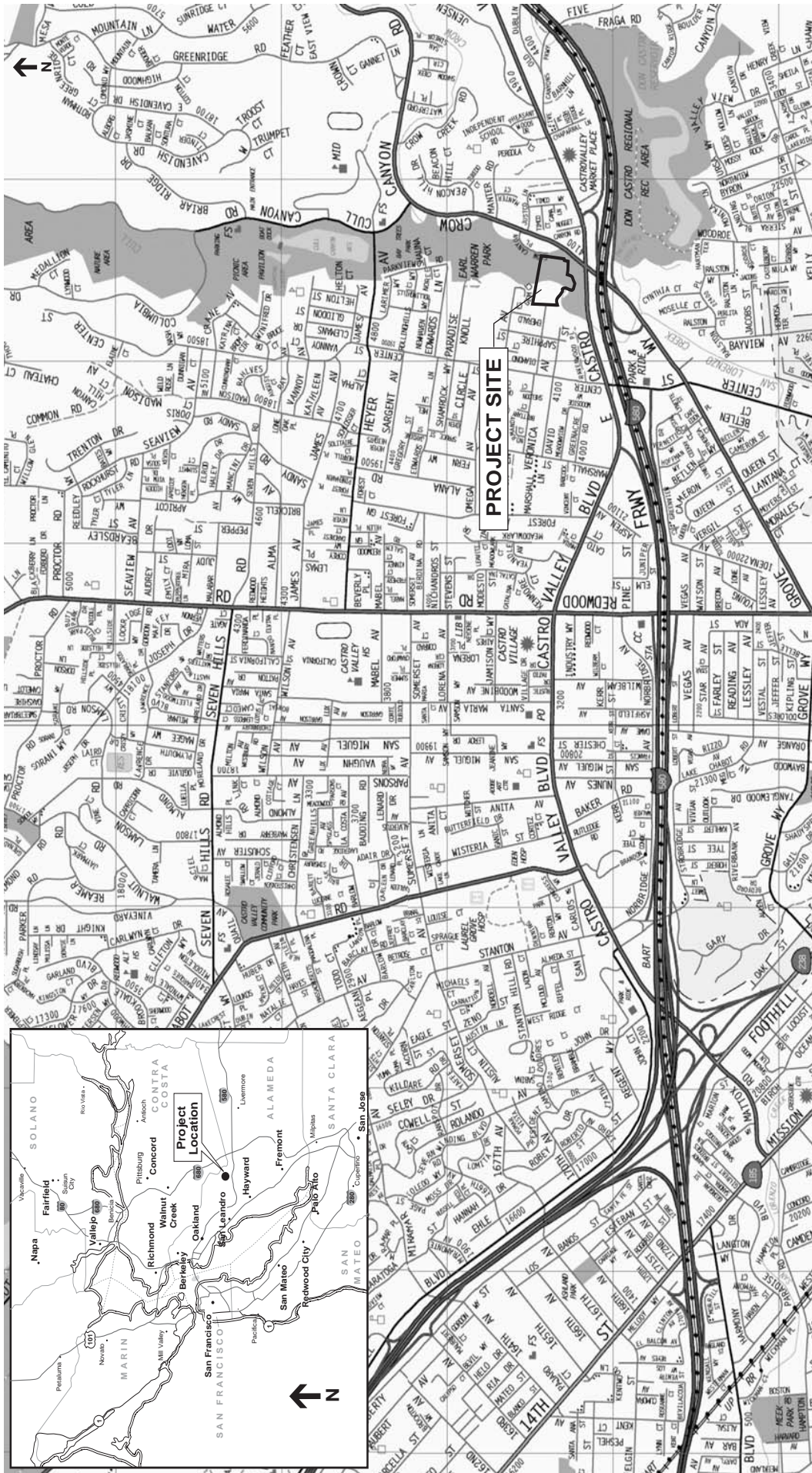


Figure 1
Project Site Vicinity

8. Description of Project:

The Project applicant seeks approval for a modified Tentative Subdivision Map and an amendment to the PD zoning to incorporate the proposed site plan. The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**.

**TABLE 1
COMPARISON OF PROJECT COMPONENTS: PREVIOUSLY APPROVED PROJECT VS. PROPOSED PROJECT**

Project Component	Previously Approved Project	Proposed Project	Difference
Project site size	8.36 acres (plus area outside boundary for bridge)	8.22 acres (plus area outside boundary for bridge)	Slightly smaller footprint (0.14 acre)
Number of lots to be developed	28	21	Decrease in number (7 lots)
Total square footage of lots	124,891 square feet	164,221 square feet	Increase in total lot area (39,330 square feet)
Internal driveways	3	1	Decrease in internal driveways
Parking	84 spaces total; 56 garage spaces and 28 on-street parking spaces (3 spaces per dwelling unit)	101 spaces, total; 42 garage spaces and 59 on-street spaces (4.8 spaces per dwelling unit)	Increase in parking (1.8 spaces per dwelling unit)
Grading	20,000 cubic yards, balanced on-site	14,000 cubic yards, balanced on-site	Decrease in total grading area (6,000 cubic yards)
Retaining wall height	9-foot maximum height	7-foot maximum height	Decrease in wall height (2 feet)
Number and area of bioretention basins	1 2,650 square feet	2 5,757 square feet	Increase in total bioretention area
Creek and Conservation Easement Area square footage	182,754 square feet	187,998 square feet	Increase in total easement area (5,244 square feet)

Specifically, the Project would involve development of 21 single-family residences on an 8.22-acre site at 4524 Crow Canyon Place, Castro Valley CA 94522. The Project would also include connections to offsite utilities, and would set aside two conservation easements totaling approximately 4.32 acres along Crow Creek. A bridge would be constructed over Crow Creek to provide access to the development from Crow Canyon Place. Parking would be provided for the Project via 42 garage spaces (2 per unit) and 59 spaces along the internal driveway which would run through the site, ending in a cul-de-sac near Veronica Avenue.

The Project would involve grading 3.9 acres of the 8.22-acre site. The Creek Setback and Riparian Corridor would define the limits of grading on the Project site, with exceptions allowed for:

- grading and construction activities necessary for bridge abutments and

- grading and construction activities necessary for the storm drain outfall into Crow Creek.

No grading or construction activities are proposed that would encroach into the Riparian Corridor for purposes of developing residential lots.

Grading would entail approximately 14,000 cubic yards (cy) of excavation and 14,000 cy of fill. Because the cut and fill would be balanced on-site, there would be no import or export of soil. Retaining walls ranging in height from two feet to seven feet would be constructed between most lots and on the western edge of the development. The Project would also include two bioretention areas which would receive discharge from the storm drain system.

Connections to offsite utilities (water and sewer) located in Crow Canyon Place would be part of the development Project. A 10-foot by 40-foot gravel parking area would be provided on the east side of Crow Creek and outside the Project boundary for flood control maintenance and access.

The Conservation Easement Area would be placed into a conservation easement granted by the landowner to a conservator, with the terms of the easement recorded/noticed on the property deed and included within the terms of Codes, Covenants, and Restrictions (CC&Rs) applied to the Project. Possible conservators include the California Department of Fish and Wildlife (CDFW) or any other qualifying tax-exempt non-profit organization that has as its primary purpose the preservation of open space as set forth in the California Civil Code 815 et seq.

Access to the Project site would be provided from the east via Crow Canyon Place across the proposed single-span bridge over Crow Creek. Emergency vehicle access would be provided from Veronica Avenue, which is west of and adjacent to the site, and via Crow Canyon Place.

The Project would be required to implement those mitigation measures identified in the Previous EIR for the Previously Approved Project to avoid or reduce significant impacts, as discussed in more detail below. Some of these mitigation measures have been incorporated into the design of the Roberts Ranch Project, and others would be implemented upon Project approval.

9. Land Uses and Setting:

The Project site is surrounded by residential development to the north, east, and west and vegetated slopes bounded by East Castro Valley Boulevard to the south. Crow Creek runs through the Project site within a steeply banked ravine along the eastern and southern edges.

The Project site is in the unincorporated Castro Valley area of Alameda County. Castro Valley is north of the City of Hayward and east of the unincorporated community of Ashland in the San Francisco Bay Area. The Project area is approximately 15 miles southeast of downtown Oakland and 30 miles north of downtown San Jose. Interstate 580 (I-580) provides regional access to the Project site.

The Project site is between Crow Canyon Place and Veronica Avenue. Castro Valley Boulevard, which parallels I-580, is south of the Project site and Crow Canyon Road lies to the east. Currently, the only direct access to the site is from Veronica Avenue.

Castro Valley is an unincorporated community with a population of approximately 60,000 people. The Castro Valley community is primarily suburban and residential in nature. The Project site is on the eastern side of the valley and surrounded to the north, west, and east by residential development. Castro Valley Boulevard and I-580 lie immediately to the south. The Project site, given the surrounding development pattern, would be an infill site.

The 8.22-acre Project site generally consists of terrain that slopes downward to the south and east from high ground located in the northeastern corner. This downward sloping ground forms a plateau-like area bordered by Crow Creek. Within the Project site, Crow Creek is contained within a relatively steeply banked ravine which occupies approximately 3 acres to the south and east of the area proposed for development. Crow Creek arcs clockwise through the eastern portion of the site and then counter clockwise to the south, where it forms the southern boundary of the Project site. The narrow eastern edge of the Project site rises steeply from above the ravine edge up toward Crow Canyon Place.

Vegetation on the northwest two-thirds of the Project site consists of the remnants of an orchard and ornamental landscaping. Oak woodland and riparian vegetation habitat occupies the slopes near the top of Crow Creek and the lower portion of the creek.

10. Lead Agency Actions and Required Approvals:

In order to subdivide and develop the Project site as proposed, the Applicant is requesting approval of the following discretionary actions:

- Approval of the proposed Vesting Tentative Subdivision Map (reflecting minor modification to the Vesting Tentative Map for the Boundary Creek Subdivision, approved November 2005)
- Approval of an amendment to the PD zoning district to allow for a reduction in the number of residential units constructed
- Subsequent approvals for a Final Subdivision Map, grading permits, and building permits

Environmental Factors Potentially Affected

Environmental factors which may be affected by the Project are listed alphabetically below.

Factors marked with a filled in block (■) have been determined to be potentially affected by the Project, involving at least one impact that has been identified as a “Potentially Significant Impact”, as indicated in the attached CEQA Evaluation and related discussion that follows.

Unmarked factors (□) were determined to be either not significantly affected by the Project, adequately examined under the Previous CEQA Document, or fully mitigated through implementation of conditions of approval or revised mitigation measures adopted by the County of Alameda as lead agency.

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

Determination

On the basis of this initial evaluation:

I find that although changes are proposed as part of the current Project that would involve revisions to the Previous CEQA Document, and that changes have occurred with respect to circumstances under which the current Project is undertaken, and there is new information, none of these involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Only minor changes to the previous EIR are required to address these changes in the Project, its circumstance, and new information. Thus an ADDENDUM to the Previous CEQA Document is appropriate, and this document constitutes that ADDENDUM.

Signature

Date

Prior CEQA Review

2004 Boundary Creek Subdivision Draft EIR

In May 2004, an application was submitted to Alameda County for rezoning, subdivision, tentative map approval, and other entitlements for a 38-unit single-family residential development (the original Boundary Creek Subdivision project; Original Project) on an 8.49-acre site in Castro Valley, an unincorporated community in Alameda County. The Original Project consisted of 37 single-family lots ranging in size from 3,483 to 6,608 square feet on the western side of Crow Creek, and 1 custom lot of approximately 12,445 square feet on the east side of Crow Creek. The Original Project included a rezone of the project site from R-1-5000 and R-1-10,000 (single-family residential, 5,000- and 10,000-square-foot minimum lot size, respectively) to PD (Planned Development). The applicants also sought a permit pursuant to the County Watercourse Protection Ordinance that would have enabled certain development activity within a creek bank setback area pursuant to that ordinance.

The *Boundary Creek Subdivision Draft EIR* prepared in August 2004 identified numerous significant environmental impacts associated with that Original Project, including:

- Inconsistency with the Castro Valley Plan, in particular those policies that emphasize residential projects to use a variety of housing types, unit clustering, and special construction techniques where these techniques can preserve natural topographic, landscape, and scenic qualities.
- Geological and geotechnical hazards, including construction on slopes adjacent to Crow Creek that could become unstable; extensive cut and fill grading that could create new, unstable soil conditions; and land clearing, grading, and cut and fill operations that could increase the risk of soil erosion.
- Impacts on biological resources including construction and grading activities that would result in impacts on riparian and oak woodland habitat along Crow Creek resulting in the loss of native vegetation; and potential construction-related impacts on special status species.
- Water quality impacts including the placement of a storm drain outfall into Crow Creek; an increase in the amount of sediment dissolved in runoff water and an increase in the amount of pollution discharged into Crow Creek.
- Hydrology impacts including an increase in impervious surface area potentially resulting in alteration of the existing drainage pattern of the site; construction of retaining walls within the 100-year flood zone, potentially leading to increased erosion on- and off-site; and an increase in the amount of surface runoff potentially exceeding the capacity of downstream stormwater systems.
- Inconsistency with setback requirements of the Alameda County Watercourse Protection Ordinance.

The August 2004 Draft EIR recommended approximately 50 mitigation measures to reduce, avoid or substantially lessen those potential environmental consequences of the Original Project. Implementation of many of these mitigation measures would result in substantial changes to the design of the Original Project.

2004 Boundary Creek Subdivision Response to Comments

Following the public review and comment period for the August 2004 Draft EIR, the applicant prepared a Mitigated/Revised Project, incorporating many of the mitigation measures recommended in the Draft EIR to determine whether such a Mitigated/Revised Project would be an environmentally superior plan that could still meet the applicant's overall objectives. This Mitigated/Revised Project was presented in the October 2004 Response to Comment document. It was similar to the Original Project; however, it differed in the following ways:

- Site planning and building design construction techniques were incorporated to be more compatible and sensitive to the sloping site, including more buildings stepped into the existing grade rather than creating all flat building pads.
- All retaining walls and grading and development activities were pulled back further away from Crow Creek.
- The extent of site grading was reduced to preserve more existing trees.
- Water quality features such as in-lot swales, bio-filters, and a centralized water quality filtration site were incorporated to provide treatment of up to 85% of all site runoff prior to discharge into the creek.
- A publicly accessible park/open space feature was provided on approximately 36,000-square-foot portion of the site adjacent to the creek.
- A homeowners association was proposed to own and maintain all private streets, the stormwater filtration system, and the creek.
- One of the originally proposed lots was removed, reducing the Revised/Mitigated Project to a 36-unit subdivision with a remainder lot rather than a 37-unit subdivision with a remainder lot.

At the Alameda County Planning Commission hearing held in December 2004, the Commission reviewed the Mitigated/Revised Project and requested that County staff, the applicant, and their respective consultants work together to further refine the Mitigated/Revised Project to provide greater protection for both the oak and riparian woodland areas adjacent to Crow Creek. Both habitats were deemed by the Commission to have high resource value and to have an ecologically fundamental role in maintaining the overall health of the Crow Creek corridor.

Addendum#1 to the 2004 Boundary Creek Subdivision Final EIR

Based on a series of field investigations, a Biological Resource Zone was established for the project area, consisting of a combination of both riparian and oak woodland vegetation. The Biological Resource Zone encompassed more area and more vegetation than the riparian woodlands as defined in the Draft EIR, and also encompassed a considerable portion of the area defined in the Draft EIR as oak woodlands. The intent of the Biological Resource Zone was to preserve both riparian and oak woodland species within this zone, to the extent feasible, in order to achieve the overall goal of protecting the functions and values of the Crow Creek corridor for plants and wildlife.

Using the Biological Resource Zone as a guide, the applicant then proposed a Modified Project (February 2005) consisting of a total of 31 residential lots and 1 remainder parcel on the east side of Crow Creek. This Modified Project provided greater setbacks from the Crow Creek channel than either the Original Boundary Creek Project or the Mitigated/Revised Project. As indicated in a March 2005 Addendum #1 to

the Boundary Creek Project EIR, the Modified Project still resulted in environmental impacts as a result of development activity proposed within the Biological Resource Zone.

In March 2005, the Planning Commission considered this Modified Project and recommended a series of additional mitigation measures intended to further protect biological resources related to Crow Creek. These measures served to further revise the Modified Project with respect to that project's effects on biological resources immediately adjacent to the creek. Generally, the Commission recommended that all grading and construction activities on the creek side of the Biological Resource Zone should be prohibited, with exceptions allowed for:

- grading and construction activities necessary for bridge abutments,
- grading and construction activities necessary for the storm drain outfall into Crow Creek,
- grading and construction activities necessary for the construction of the clean water facility, and
- grading and construction activities necessary for the portion of the internal loop road northeast of Lots 25-27.

The Planning Commission recommended that no grading or construction activities proposed for purposes of developing residential lots be allowed to encroach into the Biological Resource Zone.

Addendum#2 to the 2004 Boundary Creek Subdivision Final EIR

A subsequent May 2005 EIR Addendum #2 was prepared to address a number of issues, including: (a) definitions of riparian and/or riparian woodlands; (b) re-definition of the term "Biological Resource Zone" as Riparian Corridor¹; (c) clarification that the Riparian Corridor was indeed larger and included more land and vegetation than the riparian woodland as defined in the Draft EIR; and d) other perceived inconsistencies between the several EIR documents prepared to date. Additionally, the May 2005 EIR Addendum #2 included additional mitigation measures specifically intended to establish the permanent protection of the majority of biological resources on the creek side of the Riparian Corridor.

In June of 2005, the Alameda County Board of Supervisors decided it would be appropriate to recirculate an EIR with a current project description fully reflecting the changes that had been made to the Original Project, and the additional analysis and mitigation language incorporated into the EIR since publication of the August 2004 Draft EIR.

2005 Recirculated Boundary Creek Subdivision EIR

The 2005 Draft and Final Recirculated Boundary Creek Subdivision EIR evaluated the Revised Project, which was the applicant's attempt to develop an alternative land use and development plan for the site that incorporated all the mitigation measures recommended for the Original Project from throughout the environmental review process to date.

¹ Hereafter, Riparian Corridor, defined as the extent of all riparian vegetation, including canopy and riparian herbaceous species associated with Crow Creek; the stability or absence of stability of the creek banks; wildlife corridor use and values, since most wildlife found in the Crow Creek corridor would be unlikely to distinguish between habitats that are regarded as riparian and habitats considered riparian in association with oak woodland; and the influence of past and present anthropogenic activities (i.e., the use and modification of the property by past and current residents) as these past and present uses may have reduced the biological values of portions of the Crow Creek corridor.

The overall objectives of the Revised Project included the following:

1. To preserve more existing vegetation and trees as compared to other, previous versions of the Project by setting proposed development further back from Crow Creek and outside of its associated Riparian Corridor (including previously identified riparian habitat and oak woodland habitat).
2. To reduce grading in a manner that is more compatible and sensitive to the sloping site, and is more compatible with the setback requirements of the County's Watercourse Protection Ordinance.
3. To re-zone the site to "PD" in order to allow for a diversity of lot sizes due to the geographic constraints of the site and the constraints imposed by defined sensitive biological resources.
4. To develop and build a 28-unit residential subdivision based upon the plans contained in the Revised Project.

As indicated in the August 2005 Recirculated Draft EIR, the Revised Boundary Creek Project (see **Figure 2**) was similar to the original Boundary Creek project as follows:

- Primary access provided by a new bridge across Crow Creek connecting Crow Canyon Place to the Project site on the east side
- Development of residential homes within defined limits of grading
- Secondary access provided via an emergency vehicle access connecting the Project site to Veronica Avenue at the west end of the Project site.

The Revised Project, however, consisted of the following design and planning revisions:

- **Project Size Reduction:** The Revised Project proposed the construction of 28 single-family homes, and no custom home. The original Boundary Creek project proposed the construction of 37 homes, plus 1 custom home. The Revised Project would result in a reduction of 10 homes. The fewer number of proposed units would reduce the degree to which development encroaches upon the creek bank setback, reduce grading, preserve vegetation on the Project site, and marginally reduce traffic and related impacts.
- **Stepped or Split-Pad Foundations:** The Revised Project incorporated site planning and building design construction techniques to be more compatible and sensitive to the sloping site. All retaining walls were removed from the creek bank, including the Riparian Corridor, by requiring buildings in these areas to be stepped into the grade rather than creating flat building pads, minimizing grading and preserves vegetation on the project site.
- **Avoidance of Riparian Corridor:** The Revised Project did not propose the development of single-family homes within the Riparian Corridor on the project site. The only aspects of the Revised Project that would have required development within the Riparian Corridor associated with Crow Creek were the bridge abutments and the storm drain outfall structure. Avoidance of the Riparian Corridor would preserve vegetation, minimize grading, and reduce potential impacts on the water quality of Crow Creek.

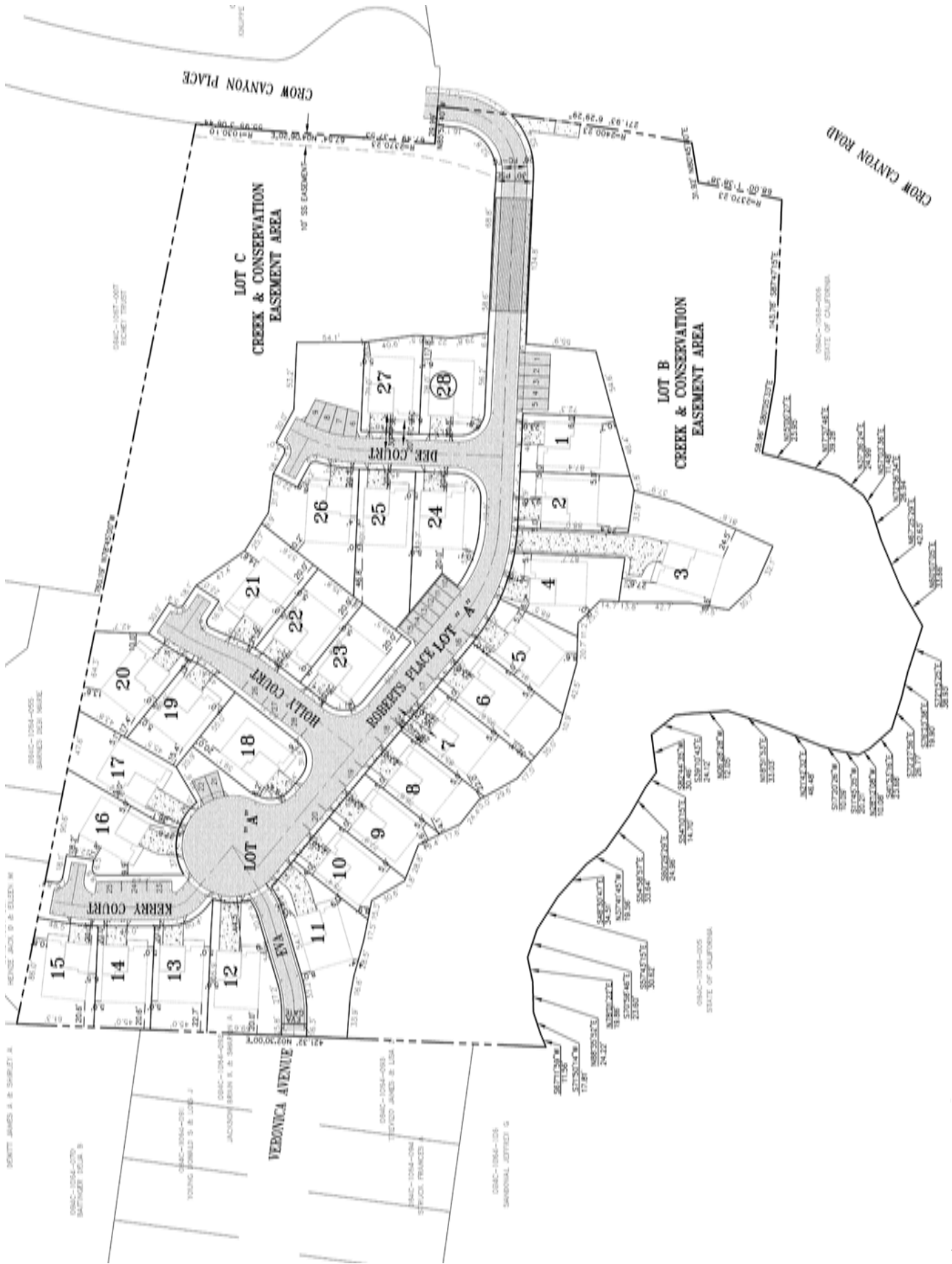


Figure 2
Previously Approved Boundary Creek Project

- **Avoidance of Creek Bank Setback Area:** The Revised Project did not propose the development of single-family homes within the creek bank setback as defined pursuant to the County Watercourse Protection Ordinance. The only aspects of the Revised Project that would have required development within the creek bank setback were the bridge abutments and the storm drain outfall structure. Avoidance of the creek bank setback would preserve vegetation, minimize grading, and reduce potential erosion and sedimentation impacts on the water quality of Crow Creek.
- **Tree Preservation:** As a result of the Revised Project's reduced grading envelop and its reduction in the overall amount of fill adjacent to the Riparian Corridor, the Revised Project would have preserved approximately 119 additional trees as compared to the original Boundary Creek project.
- **Water Quality Improvement:** The Revised Project incorporated water quality features such as in-lot swales and bio-filters where feasible, and a centralized water quality filtration site that would provide treatment of up to 85% of all site runoff prior to discharge into the creek, thereby improving water quality over the original Boundary Creek project.
- **Homeowners Association:** The Revised Project would establish a homeowners association that would own and maintain all private streets and the stormwater system.
- **Conservation Area:** A Conservation Area would be established under the Revised Project to be preserved and managed in perpetuity for permanent protection of important biological resources associated with Crow Creek. The Conservation Area is composed of Crow Creek and its associated Riparian Corridor. No construction would be allowed within the Conservation Area.
- **Public/Open Space:** The elimination of 10 lots allowed for the creation of a publicly accessible passive recreation area on the project site.

A Recirculated Final EIR was prepared in October 2005; in November 2005, that Final EIR was certified (Previous EIR). The Revised Project was approved and permits were granted by the Alameda County Planning Commission; however, that approved project was never developed.

Purpose of this Initial Study Determination

As of 2015, a further revised project—the Roberts Ranch Project—has been proposed for development on the site (see **Figure 3**). The Project proposes development of fewer lots on the site, but otherwise maintains the primary elements of the Previously Approved Project, with the exceptions noted in **Table 1**.

This document evaluates the potential environmental effects of the Project. The purpose of this evaluation is to determine, pursuant to Public Resources Code Sections 21090 and 21166 and California Environmental Quality Act (CEQA) Guidelines Sections 15180, 15162 and 15163, whether a Subsequent or Supplemental EIR is needed to fully assess and evaluate the potential environmental effects of the proposed Roberts Ranch Project, or whether the County can rely on the 2005 Recirculated Final EIR for compliance with CEQA. The analysis conducted incorporates by reference the information contained in the certified Previous EIR and includes a CEQA Checklist and supporting documentation to provide comprehensive review and public information for the basis of any determination.

CEQA provides that when an EIR has been certified, no Subsequent or Supplemental EIR shall be prepared unless the Lead Agency determines, on the basis of substantial evidence, one or more of the following:

- substantial changes are proposed as part of the Project that would involve major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects,
- substantial changes have occurred with respect to circumstances under which the Project is undertaken (i.e., a significant change in the existing or future condition) that would involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and/or
- new information of substantial importance indicates that the Project may have a new significant environmental effect or a substantial increase in the severity of previously identified significant effects.

If none of these factors are applicable then no Subsequent or Supplemental EIR is required. If some changes or additions to the original EIR are necessary, but none of the changes would warrant preparation of a Subsequent or Supplemental EIR, the lead agency may prepare an Addendum to the Previous EIR, pursuant to CEQA Guidelines Section 15164.

The analysis in the certified Previous EIR directly applies to the Project, providing the basis for the use of an Addendum; this Initial Study is considered to be the Addendum. As discussed below, the Project represents a minor change to the project analyzed in the Previous EIR.

Changes in the Project

This Initial Study evaluates whether changes that are now proposed as part of the Roberts Ranch Project may result in new or significantly increased environmental effects as compared to those disclosed in the Previous EIR. The environmental review now necessary for the Project is only required to address substantial changes to the Previous EIR necessary to adequately address new or different information specific to the current proposal. The current project is very similar to the Previously Approved Project described in the Previous EIR. There are some minor differences in some of the details, however, as indicated earlier in **Table 1**.

New Information

This Initial Study assesses whether new information, not known at the time of preparation of the Previous EIR may indicate a new or significantly increased environmental effect. New information addressed in this Initial Study includes:

- New information about greenhouse gas (GHG) emissions and their potential effects on global climate change, public environmental policy concern for which has emerged and become more formalized since 2005. Guidance has been issued by the state regarding the requirements for environmental review of proposed projects related to GHG emissions and global climate change. These issues were not addressed in the Previous EIR.
- In March of 2007 the California Regional Water Quality Control Board (RWQCB)–San Francisco Bay Region amended the National Pollutant Discharge Elimination Permit (NPDES) applicable to jurisdictions within the Alameda Countywide Clean Water Program (including unincorporated Alameda County). This amendment, which applies to many areas of the County for projects that

create and/or replace 1 acre or more of impervious area, requires that stormwater discharges from applicable new development and redevelopment projects not cause an increase in the erosion potential of the receiving stream over the pre-project (i.e., existing) condition. Any increase in runoff flow and volume is to be managed so that post-project runoff shall not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts related to beneficial uses due to increased erosive force. Such management shall be through implementation of hydro-modification requirements. The issue of potential hydro-modification requirements was not addressed in the Previous EIR.

- As part of the subsequent permitting process for the Previously Approved Project, the U.S. Army Corps of Engineers (Corps) conducted formal consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act. The Corps sought USFWS concurrence with their determination of *not likely to adversely affect* for the California red-legged frog. Although the USFWS did not concur, they did find that the mitigation measures recommended for the Previously Approved Project were suitable to avoid or minimize potentially significant impacts, and the project as then proposed would not result in jeopardy to the California red-legged frog. The biological opinion included additional terms and conditions to minimize the potential for red-legged frog mortality, harm, and harassment. The USFWS biological opinion was not addressed in the Previous EIR.

This new information is included in this Initial Study Determination, along with an assessment of whether this new information indicates that the Project may have a new significant environmental effect or a substantial increase in the severity of previously identified significant effect.

CEQA Checklist

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from approval and implementation of the Roberts Ranch Project. It evaluates those potential environmental impacts in relation to the impacts evaluated in the Previous EIR.

Given the timespan between preparation of the Previous EIR and this CEQA document, variations in the specific environmental topics addressed and significance criteria exist, but as discussed throughout this Checklist, the overall environmental impacts identified in each are largely the same with any notable differences noted.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified Previous EIR. The significance criteria from the Previous EIR have been included in this CEQA Checklist; where appropriate, the significance criteria have been updated to reflect current significance criteria established after the Previous EIR and that now apply to the proposed Project.

This CEQA Checklist provides a determination of whether the proposed Project would result in:

- Equal or Less Severity of Impact Previously Identified in the Previous EIR
- Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR
- New Significant Impact

Where the severity of the impacts of the Project would be the same as or less than the severity of the impacts described in the Previous EIR, the checkbox for Equal or Less Severity of Impact is checked. If the checkbox for Substantial Increase in Severity of Previously Identified Significant Impact or New Significant Impact were to be checked, such a check box would indicate that there are significant impacts that are either:

- peculiar to project or project site (pursuant to CEQA Guidelines Sections 15183 or 15183.3);
- not identified in the Previous EIR (per CEQA Guidelines Sections 15183 or 15183.3), including offsite and cumulative impacts (per CEQA Guidelines Section 15183);
- due to substantial changes in the project (per CEQA Guidelines Section 15162 and 15168);
- due to substantial changes in circumstances under which the project will be undertaken (per CEQA Guidelines Sections 15162 and 15168); or
- due to substantial new information not known at the time the Previous EIR was certified (per CEQA Guidelines Sections 15162, 15168, 15183, or 15183.3).

In such a circumstance, a new EIR would be required for the Roberts Ranch Project. None of these conditions were found for the Project, as demonstrated throughout the following CEQA Checklist. The Project meets the criteria and standards specified in the CEQA Guidelines sections identified above for an Addendum to the Previous EIR.

I. Aesthetics

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR. The Project site remains an undeveloped lot, and the adjacent residential uses in the immediate vicinity are the same as described in the Previous EIR.

Scenic Vistas

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.1), the Project site is not in any designated public vista, nor is it highly visible from public property because it is at a lower elevation than the surrounding landscape. Existing on-site vegetation serves to screen the site from public views. The Previously Approved Project proposed to preserve the trees within and southeast of Crow Creek, which would create a visual buffer between the new homes and public views, and any public views of the site would remain unchanged.

Private views of the site are from the residences immediately to the north, across Crow Creek to northeast, and to the southwest. Due to the downward sloping topography of the site and a grading plan that would further lower building pad elevations, the Previous EIR found that private views from the residences to the north would generally look over the new residences. As with public views of the site, preservation of trees within Crow Creek would serve as a visual buffer. The impacts on scenic vistas would be less than significant.

Roberts Ranch Project Assessment

The proposed Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would not substantially affect public or private views. The site layout of the Project would result in the protection of more trees than under the Previously Approved Project. There would be no significant changes to public or private views

in the area resulting from construction of the Project at this site. The impact of the Project on scenic vistas would be similar to and slightly reduced from those discussed in the Previous EIR because of the slightly lower density of development. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on a scenic vista. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on scenic vistas beyond those disclosed in the Previous EIR.

Scenic Resources

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.1), the Project area cannot be seen from, nor is it located within, any eligible or designated scenic highway. The Previous EIR found there would be no impact on scenic resources or routes.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The Project area cannot be seen from, nor is it located within, any eligible or designated scenic highway; therefore, the Project would have no impact on any scenic resources or routes. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on scenic resources. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on scenic resources beyond those disclosed in the Previous EIR.

Visual Character

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.1), the visual character of the Project site consists of a largely vacant, heavily wooded lot surrounded by residential development. Construction of the Previously Approved Project was found to complement the existing residential character of the area. To accommodate the development, the site would be graded and terraced, and most of the trees would be removed, which would alter the visual character of the site. Crow Creek, most of the ravine, and the existing riparian vegetation would be preserved, as well as a sizeable portion of the eastern edge of the site, thereby retaining many of the visual qualities that make this site unique. The Previous EIR concluded that the visual character or quality of the site and its surroundings would not be substantially degraded by the Previously Approved Project; therefore, impacts on visual character were found to be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Construction of proposed residences would complement the existing residential character of the area. As with the Previously Approved Project, the site would be graded and terraced, and many of the trees would be removed, which would alter the visual character of the site. The total area to be graded, however, would be reduced, as would the number of trees to be removed. Similarly, the Riparian Corridor would be protected under the Project, and the total area of Riparian Corridor protection would increase. Impacts of the Project on visual character would be slightly reduced from the Previously Approved Project. Development of the Project would not substantially degrade the visual

character or quality of the site and its surroundings; therefore, impacts on visual character would remain less than significant. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on visual character. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on visual character beyond those disclosed in the Previous EIR.

Light and Glare

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.1), the addition of new residences would add new sources of light to the area. Light from lighting inside and outside the residences, as well as street lighting, could adversely affect nighttime views of nearby residences. This impact was considered to be potentially significant under the Previous EIR.

The following standard County condition of approval was recommended in the Previous EIR to reduce the impact on nighttime views to a level of less than significant:

Vis-1: Lighting Design Guidelines. The Applicant shall design lighting to be sensitive to neighboring land uses and to minimize energy use, according to the standard County guidelines. The Alameda County Planning Department shall review the design plans to ensure compatibility of the project with all applicable guidelines. The general lighting guidelines for County projects include the following:

- Applicant shall design public area lighting so as to evenly illuminate areas of concern, but so as not to intrude upon private areas any more than necessary. Public areas not essential to security should be illuminated only when necessary for occupation by use of timers or motion detector circuits.
- Applicant shall use the lowest wattage lamps reasonable for illumination of the area of concern.
- Applicant shall install only full cutoff-shielded lights for illumination of public areas. Non-shielded lighting presently in place shall be replaced when required only with shielded fixtures.
- Applicant shall design and place night time lighting and security lighting so that it is no higher than necessary to illuminate the area of concern for security or visual comfort, and so that the lighting is directed toward the area of concern, and always below the horizontal.
- Applicant shall not position night lighting to illuminate areas beyond the site boundaries, nor shall the applicant position general lighting to radiate above the horizontal, but shall place lights or install shielded lights to illuminate only the area of concern.
- Residents shall extinguish any lights not required for onsite security reasons.
- For any lighting on areas nonessential for security or active operations, applicant shall place lights on a motion detector circuit so illumination only occurs when required for occasional visibility.
- The Homeowners Association shall enforce these conditions through CC&Rs for the Project.
- Applicant shall submit a lighting plan for review and approval by the Planning Director prior to issuance of building permits.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR. The light and glare impacts of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. The mitigation measure **Vis-1: Lighting Design Guidelines** recommended in the Previous EIR to reduce the adverse effects of light and glare remains applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Vis-1: Lighting Design Guidelines** would reduce impacts to a less than significant level because it requires the Applicant to consider light and glare impacts in the design-build process and include measures such as shielding, design revisions, or other means of reducing impacts. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified light and glare impacts beyond those disclosed in the Previous EIR.

Conclusions – Aesthetics

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant aesthetics impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to aesthetics and visual quality not previously discussed.

II. Agricultural Resources

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resource Agency, to non-agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in the loss of forest land or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions of the Project site pertaining to agricultural resources remain generally unchanged from the Previous EIR.

Conversion of Important Farmlands to Non-agricultural Use

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.2), the site does not contain Important Farmlands according to the Alameda County Important Farmland Map (1998), produced by the California Department of Conservation. The Previous EIR found that the Previously Approved Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. The conclusion of no impact would be the same for the Project.

Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on Important Farmlands. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on important farmlands beyond those disclosed in the Previous EIR.

Conflict with Agricultural Zoning or Williamson Act

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.2), a Williamson Act contract does not exist on the property. The site is zoned for residential use and is surrounded by residential uses. There would be no impact as the Original Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would not conflict with existing zoning for agricultural use or a Williamson Act contract. The conclusion of no impact would be the same for the Project. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to conflicts with agricultural zoning or the Williamson Act beyond those disclosed in the Previous EIR.

Convert Farmland to Non-agricultural Use

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.2), the site is not currently farmed. Development of residences on the site would not result in the conversion of farmed land to non-agricultural uses. There would be no impact.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would not result in the conversion of farmed land to non-agricultural uses. The conclusion of no impact would be the same for the Project. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on important farmlands. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to important farmlands beyond those disclosed in the Previous EIR.

Conflict with Forest Land Zoning

Previous EIR Conclusions

The conflict with forest land zoning was not analyzed in the Previous EIR as it was not a CEQA threshold at that time.

Roberts Ranch Project Assessment

The Project site is zoned for residential use and is surrounded by residential uses. Development of the Project would not result in a conflict with zoning for forest land or timberland. There would be no impact.

Convert Forest Land

Previous EIR Conclusions

The conversion of forest land was not analyzed in the Previous EIR as it was not a CEQA threshold at that time.

Roberts Ranch Project Assessment

The Project site does not contain forest land or forest uses. Development of the Project would not result in the loss of forest land or conversion of forest land to non-forest use. There would be no impact.

Conclusions – Agricultural Resources

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant impacts related to agricultural resources that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to agricultural resources not previously discussed.

III. Air Quality

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed BAAQMD’s mass emission rate threshold or result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Would the project have the potential to expose sensitive receptors or the general public to substantial levels of toxic air contaminants (e.g., probability of contracting cancer for the Maximally Exposed Individual [MEI] exceeds 10 in 1,000,000, ground level concentrations of non-carcinogenic toxic air contaminants would result in a Hazard Index greater than 1 for the MEI)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Would the project have the potential to frequently expose members of the public to objectionable odors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions of the Project site remain generally unchanged from the Previous EIR.

Conflict with Air Quality Plan

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.3), the Project site is in an area designated for residential use pursuant to the Castro Valley Plan. Because population growth assumptions of local general plans are used for air quality plans, the population growth resulting from development of the Previously Approved Project—which was found to be generally consistent with the Castro Valley Plan—was assumed to have been included in the growth estimate of the Bay Area Air Quality Management District’s (BAAQMD) Air Quality Plan. The Previous EIR found that the Previously Approved Project would be consistent with the growth assumptions made in BAAQMD’s Air Quality Plan, and would not obstruct implementation of that plan’s control measures. The impact was found to be less than significant.

Roberts Ranch Project Assessment

Castro Valley in unincorporated Alameda County is within the jurisdiction of the BAAQMD, which regulates air quality in the San Francisco Bay Area. The most recent BAAQMD plan for attaining California’s ambient air quality standards is the Bay Area 2010 Clean Air Plan (2010 CAP), adopted by BAAQMD in September 2010. The 2010 CAP serves to update the Bay Area ozone plan in compliance

with the requirements of Chapter 10 of the California Health and Safety Code. In addition, the 2010 CAP provides an integrated, multi-pollutant strategy to improve air quality, protect public health, and protect the climate. The 2010 CAP demonstrates how the San Francisco Bay Area will achieve compliance with the state standards for ozone and particulate matter pollution and includes reduction measures for both.

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR. The impacts of the Project would be similar to and slightly reduced from those discussed in the Previous EIR, and would remain less than significant. The Project would be consistent with growth assumptions made in BAAQMD's 2010 CAP and would not obstruct implementation of the 2010 CAP's multi-pollutant strategy to improve air quality, protect public health, and protect the climate. The introduction of new information and changed circumstances related to adoption of the 2010 CAP after certification of the Previous EIR would not result in a new or substantial increase in the severity of previously identified conflicts with policies of the CAP, and there would be no new impact related to conflicts with the 2010 CAP.

Air Quality Standards

Previous EIR Conclusions

Emissions from Construction Activities

As discussed in the Previous EIR (Chapter 4, Section 4.3), demolition of the existing structures, site clearing, grading, excavation, and other earth-moving activities comprise the major sources of construction dust and diesel equipment emissions. Construction-related traffic and the general disturbance of soil and the movement or application of construction materials can also generate a significant amount of dust and particulate matter. Emissions from construction activities would include fugitive dust emitted by equipment and vehicles and as a result of wind passing over exposed earth surfaces, and particulate matter being emitted from diesel-powered equipment. The effects of construction activities at the Project site would include the settling of dust on horizontal surfaces in the vicinity of the construction sites, and locally elevated levels of particulate matter with a diameter of 10 micrometers or less downwind of construction activity that could be inhaled by sensitive receptors. The Previous EIR found this impact to be potentially significant.

The following mitigation measures were recommended in the Previous EIR to reduce the construction-related air quality impacts to a level of less than significant:

Air-1a: Dust Control. The Project shall demonstrate compliance with all applicable County regulations and BAAQMD recommended operating procedures prior to issuance of building or grading permits, including standard dust control measures. The effective implementation of dust abatement programs, incorporating all of the following dust control measures, would reduce the temporary air quality impact associated with construction dust.

- During excavation, the construction area shall be watered using equipment and staff that are provided by the Project applicant or prime contractor, as needed, to avoid visible dust plumes. Appropriate nontoxic dust palliative or suppressant, added to water before application, may be used.

- All trucks hauling soil, sand and other loose materials shall be covered or shall maintain at least two feet of freeboard.
- All unpaved access roads, parking areas and construction staging areas shall be either paved, watered as necessary to avoid visible dust plumes, or subject to the application of (non-toxic) soil stabilizers.
- All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers as necessary to control dust and tracking of soil.
- If visible soil material is carried onto adjacent public streets, these streets shall be swept daily with water sweepers.
- All stockpiles of debris, soil, sand or other materials that can be blown by the wind shall either be covered or watered as necessary to avoid visible dust plumes.
- An off-pavement speed limit of 15 miles per hour for all construction vehicles shall be incorporated into the construction contract and enforced by the prime contractor.
- All inactive portions of the Project site (those areas which have been previously graded, but inactive for a period of ten days or more) shall be watered with an appropriate dust suppressant, covered or seeded.
- All earth-moving or other dust-producing activities shall be suspended when the above dust control measures prove ineffective in avoiding visible dust plumes during periods of high winds. The wind speed at which this suspension of activity will be required may vary, depending on the moisture conditions at the Project site, but suspension of such miles per hour.

Air-1b: Diesel Emission Reduction. The Project shall demonstrate compliance with all applicable County regulations and operating procedures prior to issuance of building or grading permits, and shall use its best efforts to adhere to the following diesel reduction efforts:

- Diesel powered equipment shall be maintained in good working condition, with manufacturer-recommended mufflers, filters, and other equipment.
- Diesel powered equipment shall not be left inactive and idling for more than ten minutes, and shall comply with applicable BAAQMD rules.
- Alternative fueled construction equipment shall be used as feasible.
- The hours of operation of heavy-duty equipment and/or the amount of equipment in use shall be limited to the extent feasible.

With implementation of these mitigation measures, the Previous EIR found this impact mitigated to a level of less than significant.

Air Pollutants from Operational Activities

As discussed in the Previous EIR (Chapter 4, Section 4.3), implementation of the Previously Approved Project would generate new regional vehicle trips, which would in turn generate new auto emissions. At the time of certification of the Previous EIR, the BAAQMD had recommended that 2,000 daily vehicle trips be used as a threshold for quantifying regional air pollutant impacts. The trip generation rate for the approved project was estimated at 9.4 daily trips per single family-residence. The number of vehicle trips generated by the Previously Approved Project would be approximately 263 trips (9.4 x 28). At this

level of trip generation, the Previous EIR found that the Previously Approved Project would not contribute significant operational air pollutants at a regional or cumulative level, and the impact was found to be less than significant.

Roberts Ranch Project Assessment

In June 2010, BAAQMD adopted updated CEQA Air Quality Guidelines, including new thresholds of significance. Lead agencies were encouraged to use these new thresholds of significance to evaluate potential air quality impacts. In March 2012, the Alameda County Superior Court issued a judgment finding that BAAQMD's adoption of the thresholds was a "project" under CEQA, and therefore the thresholds should have undergone environmental analysis. The Court set aside the thresholds on procedural grounds, but did not address any claims regarding the evidence on which BAAQMD relied in adopting the thresholds. In August 2013, the California First District Court of Appeal reversed the Superior Court's decision, ruling that adoption of CEQA significance thresholds does not constitute a "project" under CEQA, and therefore does not require CEQA review. In so doing, the Court of Appeal rejected challenges that the thresholds of significance were not supported by substantial evidence. For purposes of this EIR, Alameda County has determined that the BAAQMD's 2010 thresholds of significance are based on current regulations, scientific understanding, and methodologies, and are therefore appropriate for a conservative CEQA analysis.

Criteria Pollutant Emissions from Construction Activities

For construction-period emissions of criteria air pollutants and regional ozone precursor emissions, the BAAQMD's 2010 thresholds are 54 pounds per day for reactive organic gases (ROGs), 54 pounds per day for nitrogen oxides (NO_x), 82 pounds per day for particulate matter 10 micrometers or less in diameter (PM₁₀; exhaust only), and 54 pounds per day for particulate matter 2.5 micrometers or less in diameter (PM_{2.5}; exhaust only). For fugitive dust, implementation of BAAQMD-recommended Best Management Practices (BMPs) is identified as the threshold at which significant impacts would be reduced to levels of less than significant.

The BAAQMD's 2010 thresholds of significance also include preliminary screening information which provides a conservative indication of whether a proposed project is likely to result in the generation of construction-related criteria air pollutants and/or ozone precursors that may exceed threshold levels. If all the screening criteria are met, construction-related criteria pollutant emissions are generally found to be less than significant. For single-family residential development projects, those projects that are less than 114 dwelling units in size are not considered to result in significant construction-period impacts for criteria air pollutants, provided that all "basic" construction mitigation measures (i.e., BMPs) are included in the project design and implemented during construction; and that construction-related activities would not include significant demolition, simultaneous occurrence of more than two construction phases, simultaneous construction of more than one land use type, extensive site preparation (for grading, cut/fill, or earth movement), or extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

The Roberts Ranch Project would result in construction of 21 new single-family residences, far fewer than the screening size of 114 units considered to be the level at which potentially significant impact from construction-period criteria air pollutant and precursor emissions may occur. The Project would not include significant demolition, simultaneous occurrence of more than two construction phases, or simultaneous construction of more than one land use type, extensive site preparation and grading, or extensive material transport. Based on this screening assessment, the Project would not result in construction-period emissions of criteria air pollutants that would exceed 54 pounds per day for ROGs,

54 pounds per day for NO_x, 82 pounds per day for PM₁₀ (exhaust only), or 54 pounds per day for PM_{2.5} (exhaust only).

The BMPs recommended in 2010 by BAAQMD for mitigating construction-period PM₁₀ and PM_{2.5} fugitive dust emissions are different than those measures identified as **Air-1a: Dust Control** and **Air-1b: Diesel Particulate Matter Emission Reduction**. To ensure greater consistency with the 2010 BMPs, the following changes and additions to **Air-1a: Dust Control** and **Air-1b: Diesel Particulate Matter Emission Reduction** (from the Previous EIR) are now recommended for the Roberts Ranch Project:

Air-1a: Dust Control. The Project shall demonstrate compliance with all applicable County regulations and BAAQMD-recommended ~~BMPs operating procedures~~ prior to issuance of building or grading permits, including standard dust control measures. The effective implementation of dust abatement programs, incorporating all of the following dust control measures, would reduce the temporary air quality impact associated with construction dust.

- During excavation, the construction area shall be watered using equipment and staff that are provided by the Project applicant or prime contractor, as needed to avoid visible dust plumes. Appropriate non-toxic dust palliative or suppressants may be added to water before application. 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 trucks hauling soil, sand and other loose materials shall be covered. ~~or shall maintain at least two feet of freeboard.~~
- All unpaved access roads, parking areas and construction staging areas shall be either paved, watered as necessary to avoid visible dust plumes, or subject to the application of (non-toxic) soil stabilizers.
- 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.
- All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers as necessary to control dust and tracking of soil.
- ~~If visible soil material is carried onto adjacent public streets, these streets shall be swept daily with water sweepers.~~ 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 stockpiles of debris, soil, sand or other materials that can be blown by the wind shall either be covered or watered as necessary to avoid visible dust plumes.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. An off-pavement speed limit of 15 miles per hour for all construction vehicles shall be incorporated into the construction contract and enforced by the prime contractor.
- All inactive portions of the Project site (those areas which have been previously graded, but inactive for a period of ten days or more) shall be watered ~~with an appropriate dust suppressant, covered or seeded.~~ at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- All earth-moving or other dust-producing activities shall be suspended when average wind speeds exceed 20 miles per hour. ~~the above dust control measures prove ineffective in~~

~~avoiding visible dust plumes during periods of high winds. The wind speed at which this suspension of activity will be required may vary, depending on the moisture conditions at the Project site.~~

- Post a publicly visible sign with the telephone number and person to contact at the Air District 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.

Air-1b: Diesel Particulate Matter Emission Reduction. The Project shall demonstrate compliance with all applicable County regulations and operating procedures prior to issuance of building or grading permits, and shall use its best efforts to adhere to the following diesel reduction efforts:

- All construction Diesel-powered equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, good working condition, with manufacturer-recommended mufflers, filters, and other equipment. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Diesel powered equipment shall not be left inactive and idling for more than ten minutes, and shall comply with applicable BAAQMD rules. 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.
- Alternative fueled construction equipment shall be used as feasible. The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low volatile organic compound (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- The hours of operation of heavy-duty equipment and/or the amount of equipment in use shall be limited to the extent feasible.

The amendments to mitigation measures **Air-1a: Dust Control** and **Air-1b: Diesel Particulate Matter Emission Reduction** provide for equivalent or greater protection from dust and particulate matter criteria pollutant emissions than those measures from the Previous EIR. With implementation of these amended mitigation measures, construction-period dust and criteria pollutant emissions would be reduced to a level of less than significant.

Consistent with the conclusions of the Previous EIRs, the Roberts Ranch Project would result in a less than significant impact on air quality from construction-period criteria pollutants and dust. The introduction of new information and changed circumstances related to new thresholds of significance and newly recommended BMPs since publication of the Previous EIR (now incorporated as mitigation

measures for the Project) would not result in a new or substantial increase in the severity of the previously identified construction-period dust or criteria pollutant emission impacts beyond those disclosed in the Previous EIR.

Criteria Air Pollutants from Operational Activities

For operational emissions of criteria air pollutants and regional ozone precursors, the effective thresholds (BAAQMD 2010) are 54 pounds per day (or 10 tons/year) for ROG, 54 pounds per day (or 10 tons per year) for NO_x, 82 pounds per day (or 15 tons/year) for PM₁₀, and 54 pounds per day (or 10 tons/year) for PM_{2.5}.

The 2010 thresholds of significance also include preliminary screening information which provide a conservative indication of whether a proposed project would result in the generation of operational criteria air pollutants that may exceed threshold levels. If the screening criteria are met, operational impacts related to project emissions of criteria pollutants are generally found to be less than significant. For single-family residential development projects, those projects that are less than 325 dwelling units are considered to not result in a significant impact due to criteria air pollutants. The Roberts Ranch Project proposes to develop 21 single-family residences, well below the screening size, and thus would not result in the generation of significant operational criteria air pollutants.

Consistent with the conclusions of the Previous EIR, the Roberts Ranch Project would result in a less than significant cumulative impact on air quality from operational criteria air pollutants and ozone precursor emissions. The introduction of new information and changed circumstances related to new thresholds of significance and screening criteria since publication of the Previous EIR would not result in a new or substantial increase in the severity of the previously identified operational emission impacts beyond those disclosed in the Previous EIR.

Exposure of Sensitive Receptors to Substantial Pollution Concentrations

Previous EIR Conclusions

The Previous EIR did not assess potential impacts related to short-term exposure of existing sensitive receptors to construction-period toxic air contaminant (TAC) emissions other than construction-related dust and increased criteria pollutants as described above. Nor did the Previous EIR assess potential impacts associated with exposure of new homes within the Project area to existing sources of TAC emissions. At the time of preparation of the Previous EIR, there were no applicable thresholds for these impacts.

Roberts Ranch Project Assessment

The BAAQMD 2010 thresholds now include new thresholds related to exposure of sensitive receptors to substantial pollution concentrations and TACs. These currently effective thresholds now include:

- Exposure of existing sensitive receptors (i.e., existing residents) to substantial levels of construction-period TAC emissions resulting in an increased cancer risk level greater than 10 in 1 million, a non-cancer risk (chronic or acute) hazard index greater than 1.0, or an increased concentration of annual average PM_{2.5} of greater than 0.3 microgram per cubic meter (µg/m³).
- Exposure of a new sensitive receptor (i.e., a new residence) to substantial levels of TACs resulting in a cumulative cancer risk level greater than 100 in 1 million, a cumulative non-cancer risk (chronic or acute) hazard index greater than 10.0, or a cumulative increase of greater than 0.8 µg/m³ of annual average PM_{2.5}.

Construction-Period Toxic Air Contaminants

The 2010 thresholds do not include screening levels below which construction-period TAC emission levels are considered to be less than significant. Rather, BAAQMD suggests construction-period TAC emission impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors, as applicable.

Construction-related activities could result in the generation of TACs, specifically diesel PM, from on-road haul trucks and off-road equipment exhaust emissions. Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70% at a distance of approximately 500 feet. In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods which do not correlate well with the temporary and highly variable nature of construction activities. Based on the prior experience of the preparers of this CEQA document, construction-period TAC emissions from single-family residential projects do not typically exceed threshold levels until those residential projects include simultaneous construction of approximately 200 dwelling units or more. Additionally, implementation of construction mitigation measures (**Air-1a** and **Air-1b**, above) would also reduce diesel PM exhaust emissions.

For these reasons, it is unlikely that the temporary and relatively small scale of construction for the Roberts Ranch Project would exceed applicable TAC emission thresholds, and the impact is considered less than significant. Similar to concerns related to dust suppression, however, construction-period BMPs are recommended to further reduce and minimize construction-period TAC emissions. These BMPs (which are hereby amended to the diesel particulate matter emission reductions found in mitigation measure **Air-1b**) include the following:

Air-1b: Diesel Particulate Matter Emission Reduction. The Project shall . . . use its best efforts to adhere to the following diesel particulate matter reduction efforts:

- Where access to alternative sources of power (i.e., the electrical grid) are available, portable diesel engines shall be prohibited.
- All off-road equipment shall have engines that meet or exceed either U.S. Environmental Protection Agency (EPA) or CARB Tier 2 off-road emission standards, and/or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy.

Exceptions may be granted if the project sponsor has submitted information providing evidence to the satisfaction of the County that a particular piece of off-road equipment with a CARB Level 3 Verified Diesel Emissions Control Strategy is technically not feasible, would not produce desired emissions reductions due to expected operating modes, or that installing the control device would create a safety hazard or impaired visibility for the operator.

Existing sensitive receptors near the Project are not expected to be exposed to substantial levels of TACs that would exceed currently effective threshold levels, and the impact would be less than significant. The introduction of new information or changed circumstances related to new thresholds for exposure sensitive receptors to construction-period TAC emissions since publication of the Previous EIR would not result in a new impact.

Exposure of New Residents to Toxic Air Contaminants

Since publication of the Previous EIR in 2005, the BAAQMD has also developed several tools to assist in the assessment of TAC exposure of new sensitive receptors (i.e., new homes), including a geographical database of cancer risks, hazards, and PM_{2.5} concentrations for most stationary sources permitted by BAAQMD since 2008, screening tables for PM_{2.5} concentrations and cancer risks generated from surface streets carrying substantial traffic volumes, and geographical data points for TAC emissions generated along freeway segments throughout the Bay Area.

- From the permitted database information compiled by BAAQMD, there are no BAAQMD permitted stationary sources of TACs or PM_{2.5} emissions identified within a 1,000-foot zone of influence for the Project site.
- From the BAAQMD's I-580 freeway data point nearest to the Project site, emission levels at the nearest home (which is approximately 650 feet from the freeway, but data for emission levels at 500 feet were used for a conservative analysis) were found to be 19.7 in a million for increased cancer risk, a hazard index of 0.017 and 0.011 respectively for non-cancer risk (chronic or acute), and an annual average PM_{2.5} concentration of 0.14 µg/m³.
- Based on the BAAQMD screening tables for PM_{2.5} concentrations and cancer risks generated from surface streets (i.e., Crow Canyon Road, carrying nearly 30,000 average daily trips), the risk levels at the nearest home (conservatively estimated at 200 feet from the roadway) is estimated to be an increased cancer risk of 3.86 in a million, and a PM_{2.5} annual concentration of 0.167 µg/m³.

When combined on a cumulative level, the health risks associated with TAC exposure at the site are estimated at an increased cancer risk of approximately 23.6 in 1 million (well below the cumulative threshold of 100 in 1 million), and an annual average PM_{2.5} concentration of approximately 0.3 µg/m³ (below the cumulative threshold of 0.8 µg/m³).

New sensitive receptors within the Project site would not be exposed to substantial pollution concentrations or toxic air contaminants that would exceed currently applicable threshold levels, and the impact would be less than significant. The introduction of new information related to current roadway and stationary source emissions, or the changed circumstances related to new cumulative thresholds for exposure of new sensitive receptors since publication of the Previous EIR would not result in a new significant impact.

Odors

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.3), development of the Previously Approved Project was not found to create any significant odors or to be exposed to significant odors.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project, would not create any significant odors, and there is no new information to indicate any new sources of significant odors that would adversely affect the new residents. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to odors. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to odors beyond those disclosed in the Previous EIR.

Conclusions – Air Quality

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant impacts related to air quality that were not identified in the Previous EIR. The Roberts Ranch Project would not result in significant off-site or cumulative effects related to air quality not previously discussed.

IV. Greenhouse Gas Emissions

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project: a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Greenhouse Gas Emissions

Previous EIR Conclusions

The Previous EIR included a comprehensive description of the existing setting and the regulatory setting related to air quality, based on scientific information and regulatory requirements current as of that time. It did not include a discussion of setting, regulatory requirements, or impact analysis specific to the issue of GHG emissions or climate change, as these were not CEQA threshold topics at the time.

Roberts Ranch Project Assessment

Since 2005, there has been significant advancement in scientific understanding of the relationship between certain air emissions and trend-line changes in climatic conditions that have national and global ramifications. In light of more recent legislative action on this topic and directives emanating from the California Attorney General’s office, this environmental document provides the following short summary and assessment of this Project’s contribution to GHG effects.

Environmental Setting

Gases that trap heat in the Earth’s atmosphere are called GHGs. These gases play a critical role in determining the Earth’s surface temperature. Part of the solar radiation that would have been reflected back into space is absorbed by these gases, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Scientists have proven that emissions from human activities such as electricity generation, vehicle emissions, and even farming and forestry practices, have elevated the concentration of GHGs in the atmosphere beyond naturally occurring concentrations, enhancing the greenhouse effect and contributing to the larger process of global climate change. The six primary GHGs are carbon dioxide (CO₂), emitted when solid waste, fossil fuels, and wood are burned; methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (primarily used as refrigerants); perfluorocarbons (typically emitted as by-products of industrial and manufacturing processes); and sulfur hexafluoride (primarily used in electrical transmission and distribution). Although there are other contributors to global warming, these six GHGs are identified explicitly by the U.S. EPA as threatening the public health and welfare of current and future generations.

In 2008, the U.S. emitted about 7 billion tons of carbon dioxide-equivalent (CO₂e) gases, a 14 percent increase from 1990. In 2009, net emissions for California were approximately 453 million metric tons of CO₂e (MTCO₂e), or about 6.5 percent of the U.S. emissions. The statewide 2009 total GHG emissions represented a 1.3 % decrease from year 2000 emission levels and a 6.1 % increase from 1990 emissions levels.²

BAAQMD completed a GHG emission inventory for the Bay Area in 2010 using a base year of 2007.³ Throughout the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) was, and remains the single largest source of GHG emissions, accounting for more than 36% of the 95.8 million tons of GHG emissions in 2007. Industrial and commercial sources were the second largest contributors of GHG emissions with nearly 36% of total emissions, domestic sources (such as home water heaters and furnaces) account for about 7% of the Bay Area's GHG emissions, and energy production accounted for 16% percent. Off-road equipment and agriculture make up the remainder with approximately 3% and 1% of the total Bay Area 2007 GHG emissions, respectively.

Research suggests that as a result of climate change, California will experience hotter and drier conditions, reductions in winter snow, an increase in winter rains, sea level rise, significant changes to the water cycle, and an increased occurrence of extreme weather events.

Regulatory Setting

Global climate change is addressed through the efforts of various federal, state, regional, and local government agencies as well as national and international scientific and governmental conventions and programs. The following provides a short summary of relevant state, regional, and local measures to address GHG emissions.

- **Climate Action Plan:** Assembly Bill (AB) 1493, enacted in 2002, directs CARB to develop and implement regulations that achieve the “maximum feasible reduction” of GHG emissions from passenger vehicles, light-duty trucks, and other noncommercial vehicles.
- **Executive Order S-3-05:** On June 1, 2005, Governor Schwarzenegger signed Executive Order S-3-05 which established the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 emission levels; by 2020, reduce GHG emissions to 1990 emission levels; and by 2050, to reduce GHG emissions to 80 percent below 1990 levels.
- **AB 32:** In 2006, the California Global Warming Solutions Act of 2006 (or AB 32), was signed into law by Governor Schwarzenegger. The law codified the goal to reduce statewide GHG emissions to 1990 levels by the year 2020. This reduction is being accomplished using several approaches, including a statewide cap on GHG emissions.
- **Scoping Plan:** AB 32 also required that CARB adopt a Scoping Plan that shows how emissions reductions will be achieved using regulations, voluntary actions, monetary and non-monetary incentives, market mechanisms, and other actions. CARB adopted the final Scoping Plan in December 2008. The Scoping Plan contains the main strategies California will implement to reduce CO₂e emissions by approximately 30 percent from the state's projected 2020 emissions under an otherwise “business-as-usual” scenario.

2 California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2009, December 2011.

3 BAAQMD, February 2010, Source Inventory of Bay Area Greenhouse Gas Emissions, available at <http://www.baaqmd.gov/Divisions/Planning-and-Research/Emission-Inventory/Greenhouse-Gases.aspx>.

- **Senate Bill (SB) 375:** The transportation sector contributes approximately 40 percent of the GHG emissions in California. While substantial reductions to GHG emissions from automobiles and light trucks can be achieved through new vehicle technology and by the increased use of low carbon fuel, the legislature determined that these reductions will not be enough to achieve the GHG emission reduction goals pursuant to AB 32 and that it will therefore be necessary to achieve additional significant GHG reductions from changed land use patterns and improved transportation. SB 375 melds regional transportation and local land use planning in an effort to achieve GHG emission reductions from automobiles and light trucks by using transportation and land use planning to implement “smart growth” principles, thereby reducing vehicle trips and the resulting GHG emissions.
- **California’s Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24):** Title 24 building standards were first established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The most recent 2013 update (which took effect in January 2014) directs that California’s growing building demand must be met with cost-effective energy efficiency, with “zero net energy” goals for new homes by 2020 and commercial buildings by 2030, resulting in a substantial reduction of GHG emissions per year.
- **California Green Building Standards Code (CALGreen):** CALGreen was developed to provide a consistent approach to green building in the state. Taking effect in January 2011, CALGreen lays out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to further encourage building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building’s impact on the environment and promote a more sustainable design. Local jurisdictions are required to adopt the CALGreen provisions.
- **Sustainable Communities Strategies and Plan Bay Area:** SB 375 created a new regional planning mechanism, the Sustainable Communities Strategy, which promotes high density, transit-oriented development, and creates incentives for specifically defined, high-density development projects. The Sustainable Communities Strategy must set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce GHG emissions from automobile and light trucks to achieve the GHG emission reduction targets approved by CARB. On July 18, 2013, the Association of Bay Area Governments and the Metropolitan Transportation Commission adopted Plan Bay Area, an integrated transportation and land use-use strategy through 2040 that marks the nine-county Bay Area region’s first long-range plan to meet the requirements of SB 375.
- **Alameda County Unincorporated Community Climate Action Plan:** The Alameda County Climate Action Plan addresses reduction of GHG emissions through a series of 37 local programs and policy measures related to transportation, land use, building, energy, water, waste, and green infrastructure. The Plan is intended enable the County to reduce its community-wide emissions by more than 15% by the year 2020. The Plan was approved by the Board of Supervisors on February 4, 2014.
- **Alameda County Green Building Ordinance–Unincorporated Communities:** Alameda County adopted a Green Building Ordinance for residential and commercial properties in unincorporated communities in 2009. The goal of the ordinance is to promote practices that will reduce water and resource usage, reduce waste, and increase energy efficiency in the

construction or remodeling of residential and nonresidential structures. Pursuant to the ordinance, building permit applications for all new residential construction or rebuilt residential construction greater than 1,000 square feet, and all new or rebuilt non-residential construction greater than 3,000 square feet located in the unincorporated areas of Alameda County, must submit documentation demonstrating how specific green building standards (GreenPoint Rated, LEED, or certification from a qualified third party) are met.

Greenhouse Gas Emission Levels

The thresholds of significance used in this CEQA document pertaining to GHGs/global climate change are generally based on thresholds adopted by the BAAQMD in May 2011 (BAAQMD CEQA Guidelines). Lead agencies must apply appropriate thresholds based on substantial evidence in the record, and the thresholds used in this document rely upon the technical and scientific basis for BAAQMD's 2011 thresholds, consistent with and as authorized by CEQA Guidelines Section 15064. These thresholds indicate that a land development project would have a significant impact on the environment if it would generate GHG emissions, either directly or indirectly, that would produce total emissions of more than 1,100 MTCO₂e annually, or more than 4.6 MTCO₂e per service population annually.

The BAAQMD CEQA Guidelines also include screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant GHG impacts. If all of the screening criteria are met by a project, then the lead agency or applicant need not perform a detailed assessment of the project's GHG emissions, and impacts are deemed less than significant. Under the screening criteria for single family developments, those projects that include more than 56 dwelling units are deemed to have the potential to result in significant operational impacts related to GHG emissions.

The Roberts Ranch Project, which proposes to construct 21 residential units, does not meet the BAAQMD screening criteria, and thus, impacts related to GHG emissions would be less than significant. Construction of the Project would generate GHGs through hauling of construction waste and vegetation removed during grading, use of construction equipment, and employee travel, but Project operation would generate minimal GHG emissions through water use, energy use, waste generation, and vehicle trips. Development of the Project would therefore result in a less than significant impact related to GHG emissions. The introduction of new information related to the significance of GHG emissions and new regulatory requirements pertaining to GHG emissions, or the changed circumstances related to new cumulative thresholds for GHG emission from individual projects that have been developed since publication of the Previous EIR would not result in a new significant impact.

Consistency with Plans to Reduce Greenhouse Gas Emissions

The *Alameda County (Unincorporated Areas) Community Climate Action Plan*, approved by the Board of Supervisors on February 4, 2014, addresses reduction of GHG emissions through a series of 37 local programs and policy measures related to transportation, land use, building energy, water, waste, and green infrastructure. Development of the Roberts Ranch Project is required to comply with California Title 24 standards for energy efficiency as well as the County's Green Building Ordinance, which stipulates that new residential projects must achieve minimum certification under either LEED (Leadership in Energy and Environmental Design) for Homes, Build It Green's Green Point rated system, or another nationally recognized program. As a result, the Project would be consistent with programs and policy measures identified in the Alameda County (Unincorporated Areas) Community Climate Action Plan. The impact would therefore be less than significant. The introduction of new information

and changed circumstance pertaining to regulatory building code requirements that have been developed since publication of the Previous EIR would not result in a new significant impact.

Conclusions – Greenhouse Gas Emissions

Based on an examination of the above GHG analysis, implementation of the Project would not result in any new significant impact related to GHG emission of inconsistencies with policies and programs intended to reduce GHG emissions. The Roberts Ranch Project would not result in significant on-site, off-site, or cumulative effects related to GHG emissions, even though these effects were not fully addressed in the Previous EIR.

V. Biological Resources

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged since publication of the Previous EIR.

Special Status Species

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 5, Section 5.4), a biological assessment was conducted for the project site as well as protocol-level surveys for the federally threatened California red-legged frog.⁴ Suitable habitat for the California red-legged frog was found to be present, but no red-legged frogs were observed on the site during the surveys. The Previous EIR also found that, although it is unlikely that northwestern pond turtle or nesting birds and raptors use the site, these species can move into the area relatively quickly if conditions are appropriate. Construction activities and overall conversion of the site to residential was found to potentially adversely affect special status species, determined to be a potentially significant impact.

The following mitigation measures were recommended in the Previous EIR to reduce the impacts on special status species:

Bio-4a: Pre-Construction Surveys. Pre-construction surveys shall be conducted by a qualified biologist prior to any ground disturbance or tree cutting no more than 30 days prior to construction.

Bio-4b: Buffer Zones. If pre-construction surveys locate special status species on the Project site, a construction-free buffer zone shall be established by the biologist in consultation with CDFW.

Bio-4c: California Red-legged Frog Consultation. As part of the permitting process, the applicant shall request that the Corps consult with the USFWS using their January 26, 1999 Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog (herein referred to as Programmatic Consultation). If the Corps allows the Project to proceed forward under the Programmatic Consultation (as evidenced in an issued Corps permit), the avoidance and protection measures presented in the USFWS Programmatic Consultation will be implemented for this Project. These protection measures include having a biological monitor present during all work in the creek channel, installing frog exclusion fencing on the up and downstream ends of the work area, implementing an employee education program, and dewatering the creek channel (use of coffer dams) immediately prior to work so that the work area does not serve as an attractant to California red-legged frogs. While dewatering the construction area, a biological monitor would remain onsite to remove any frogs trapped in the enclosed work area. The biological monitor would remain on site during all work in the creek channel (creek includes bed, bank, channel).

As an alternative to this approach, pursuant to the 1997 USFWS guidelines for conducting California red-legged frog site assessments and surveys, a formal California red-legged frog assessment would be submitted to the USFWS requesting permission to conduct a protocol survey for California red-legged frog. If approved by the USFWS, protocol surveys for California red-legged frogs should be conducted by a USFWS authorized California red-legged frog biologist between May 1 and November 1. The results of the survey would be submitted to the USFWS. If no California red-legged frogs are found during the USFWS approved surveys, then there would be no further requirements for the red-legged frog. If the California red-legged frog

⁴ see Appendix C of the Biological Assessment in Appendix C of the 2004 EIR for the Original Project

is found during surveys, or if the USFWS assumes presence of this frog and declines to approve surveys, then the applicant shall be required to obtain an incidental take permit from the USFWS prior to any ground breaking at the project site.⁵ A copy of the incidental take permit (also known as a “non-jeopardy” biological opinion) shall be submitted to the Alameda County Planning Department prior to any ground breaking.

The Previous EIR found that implementation of mitigation measures **Bio-4a** through **Bio-4c** would reduce potentially significant impacts on special status species to a less than significant level.

Loss of Foraging and Refuge Habitat

The Previous EIR found that development of the Previously Approved Project would result in a loss of a small amount of potential foraging and refuge habitat that special status avian species (e.g., golden eagle, northern harrier) may occasionally use. The Previous EIR concluded that there is sufficient alternative foraging habitat in the region, and that the existing uplands within the Project site and outside the Crow Creek channel were in poor condition and do not provide good escape or refugia habitat. The Previous EIR also concluded that, while development of the Previously Approved Project could result in the further degradation of these uplands, impacts on foraging and refuge habitat for special status species would be less than significant.

Subsequent Permitting Activities

Section 7 Consultation, US Fish and Wildlife Service

Following certification of the Previous EIR in 2005, the then-project applicants filed for a Corps permit specific to construction of the bridge over Crow Creek and a storm drain outfall within the creek and below the bridge. The Corps initiated Section 7 consultation with the USFWS regarding the effects of the proposed outfall and bridge on endangered species. USFWS issued their biological opinion on November 27, 2006 (**Attachment A**). The findings of their consultation represent new information, and are summarized below.

- The USFWS determined that the project is not likely to adversely affect Alameda whipsnake or the callippe silverspot butterfly due to apparent lack of suitable habitat for both of these species.
- The Project site is within the South and East San Francisco Bay Recovery Unit for the red-legged frog. Because suitable habitat for the California red-legged frogs is present on and near the site, and because of the biology and ecology of the frog, USFWS believes the red-legged frog is reasonably certain to occur.
- Development of the Previously Approved Project could have direct and indirect adverse effects on red-legged frogs, including the loss of potential dispersal habitat. Construction activities could result in mortality, injury, or harassment of individual red-legged frogs. Disturbance and displacement of red-legged frogs may increase the potential for predation, desiccation, and competition for food and shelter, or vehicle strikes and other potential effects.
- The USFWS anticipates that incidental take of the red-legged frog will be difficult to detect because of the secretive nature of the species, their relatively small size, and cryptic coloration make the finding of a dead specimen unlikely, and the species occurs in habitats that make it

⁵ The USFWS issued the biological opinion on November 27, 2006. See **Attachment A**.

difficult to detect. Losses of red-legged frogs may also be difficult to quantify due to seasonal fluctuations in their numbers, random environmental events, changes in water regime at their breeding ponds, or additional environmental disturbances. Therefore, the USFWS anticipates that all red-legged frogs found at the 8.3-acre site will be subject to incidental take. Incidental take is expected to be in the form of harm, harassment, injury, and mortality to red-legged frogs from habitat modification, construction-related disturbance, and monitoring and maintenance of the conservation area.

- After reviewing the current status of the red-legged frog, the environmental baseline for the action area, the effects of the proposed action and the cumulative effects, it is the biological opinion of the USFWS that the Previously Approved Project, including the level of anticipated take, is not likely to result in jeopardy to the red-legged frog. Critical habitat has been designated for the red-legged frog but is not located within the action area; therefore none will be adversely modified or destroyed as a result of the proposed action.
- Upon implementation of “Reasonable and Prudent Measures” to minimize the potential of red-legged frog mortality, harm, and harassment from project implementation as identified in the biological opinion, incidental take associated with the project in the form of harm, harassment, capture, injury, and death of the red-legged frog caused by habitat loss and construction activities will become exempt from the prohibitions described under Section 9 of the Endangered Species Act which prohibit take of endangered and threatened species. Take that is incidental to and not intended as part of the Corps permit action is not considered to be prohibited, providing that such taking is in compliance with the terms and conditions of the November 2006 Incidental Take Statement.

The biological opinion is inclusive of a total of 15 separate programmatic conservation measures to be taken before and during construction activities; implementation of a compensation program for the preservation, restoration and enhancement of riparian and oak woodlands; construction-period monitoring by an ecological monitor as well as monitoring of the success of the compensation area for a period of 10 years; and 7 detailed Terms and Conditions necessary to implement the Reasonable and Prudent Measures associated with the Incidental Take Statement.

Re-initiation of formal consultation with USFWS would be required where discretionary federal agency (i.e., Corps) involvement or control over the action has been maintained, and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the biological opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

Roberts Ranch Project Assessment

Special Status Species

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Among these changes are adjustments to the overall grading and development envelop of the Project, which reduce the extent of grading activity and development and provide further separation from the more sensitive habitat within Crow Creek than was provided in the Previously Approved Project. Overall impacts on special status species from development of the Roberts Ranch Project would be similar to those discussed in the Previous EIR, however, and would remain potentially significant.

Mitigation measure **Bio-4c: California Red-legged Frog Consultation** (as recommended in the Previous EIR) has effectively been implemented with issuance of the Section 7 Consultation for the Boundary Creek Subdivision Project by the USFWS in November of 2006. Furthermore, mitigation measures **Bio-4a: Pre-Construction Surveys** and **Bio-4b: Buffer Zones** (as also recommended in the Previous EIR) have been further clarified and defined pursuant to the USFWS itemized programmatic conservation measures, required compensation program, monitoring requirements, and terms and conditions implementing reasonable and prudent measures to minimize the potential of red-legged frog mortality, harm, and harassment. The Project will be required to implement each and all of these identified measures pursuant to issuance of the Corps' Nationwide Permits (NWP) 7 – Outfall Structures, and 33 – Temporary Construction, Access and Dewatering, most recently reissued in September 2014.

There are no changes in the Roberts Ranch Project that would result in a new or substantial increase in the severity of previously identified impacts on special status species beyond those disclosed in the Previous EIR. Whereas there is now new information relative to the USFWS biological opinion regarding the potential take of red-legged frog, and the terms and conditions required of the Project to minimize the potential take of red-legged frog, this new information does not result in a new or substantial increase in the severity of previously identified impacts on special status species beyond those disclosed in the Previous EIR. Overall, there would be no new impacts on special status species beyond those identified in the Previous EIR.

Loss of Foraging and Refuge Habitat

The Roberts Ranch Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would result in a loss of a small amount of potential foraging and refuge habitat, but the impact on foraging and refuge habitat would be similar to and slightly reduced from those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to the loss of foraging and refuge habitat for special status species. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to the loss of foraging and refuge habitat for special status species beyond those disclosed in the Previous EIR.

Riparian Habitat and Sensitive Natural Communities

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 5, Section 5.4), adjacent oak woodlands and riparian vegetation on the Project site contain high resource values with respect to the overall health of Crow Creek and its corridor. In order to best achieve the overall goals of protecting the functions and values of the Crow Creek channel on the Project site, a boundary line was established that incorporated both oak woodlands and riparian habitats. Factors considered in establishing this boundary included the extent of all riparian vegetation, including canopy and riparian herbaceous species associated with Crow Creek; the stability or absence of stability of the creek banks; wildlife corridor use and values; and the influence of past and present anthropogenic activities (i.e., use and modification of the property by past and current residents) as these past and present uses may have reduced the biological value of portions of the Crow Creek corridor. The area between this established boundary and Crow Creek was referred to

as the Riparian Corridor.⁶ The outward boundaries of the Riparian Corridor were defined as the most extensive (or landward) locations associated with the following:

- the top-of-bank extending landward to the greater extent of either the outward extent of the drip line of any tree located within the banks of the creek channel, or to the outside edge of any dominant riparian herbaceous community located above and beyond the top-of-bank of Crow Creek;
- the outward edge of any tree (most commonly a coast live oak) rooted at, or just below the top of the creek channel bank;
- the outward extent of riparian herbaceous vegetation located within or contiguous to the creek banks; and/or
- in the area of the “peninsula” (Lot 3 under the approved Project), the Riparian Corridor was extended landward beyond the drip line of trees within the creek channel to account for a wildlife movement corridor through this area.

This definition of Riparian Corridor was not intended to re-define County policy or to reflect any particular jurisdictional boundary for any of the resources agencies that may be responsible for subsequent permitting of the Project. It was also not intended define riparian habitat or vegetation; or to necessarily apply to any other locations or projects other than this particular Project site. It was instead intended to be a site-specific response to the Alameda County Planning Commission’s request to define a broad, comprehensive area of important biological resources associated with Crow Creek for this specific site only, and for the Previously Approved Project.

The project design ultimately approved by Alameda County in 2005 was designed so that, with a few exceptions described below, the outward edge of grading was pulled away from the top of the creek bank with grading activities terminating at the edge of the Riparian Corridor. No residential lot development was approved within the Riparian Corridor. The minor exceptions included:

- A clear-span bridge was proposed to cross over Crow Creek. The bridge form and the location and character of the abutments were sited to avoid impacting the Riparian Corridor, to the extent practicable. The bridge location was sited at one of the narrowest portions of the Riparian Corridor along Crow Creek, and contains the fewest and most dispersed trees.
- The Previously Approved Project also included a stormwater outfall structure that requires construction of rock and erosion control measures within the Riparian Corridor, and within Crow Creek itself. Approximately 50 square feet (0.001 acre) would be filled for rock and biotechnical erosion control measures needed for the outfall. Additionally, approximately 2,500 square feet (0.06 acre) of the jurisdictional area of the Creek would be temporarily affected for installation of a sandbag wall needed to keep creek waters from the outfall construction site. Once the outfall is constructed, the sandbags would be removed and the creek flow would be returned to normal.

The Previous EIR recognized that construction of the bridge abutments, the storm water outfall and associated erosion control measures would still result in potentially significant impacts on the Riparian Corridor, and would require permits from the Corps, RWQCB, and/or the CDFW prior to initiating this

⁶ This boundary was originally used to define a Biological Resources Zone, or Biological Resource Protection Zone. But because these terms are not scientific terms used, acknowledged or accepted by any of the resource agencies or by the County, this term was discontinued in the October 2005 Final EIR and instead referred to as the Riparian Corridor.

work. The following mitigation measures were adopted as part of the Previous EIR to ensure conformity with the Riparian Corridor restrictions and to address the bridge and storm drain outfall impacts:

Bio-1a: Restricted Development within the Riparian Corridor. No grading or construction activities for proposed residential lots, including grading for yards, building pads or cantilevered decks, shall be allowed to encroach into the Riparian Corridor. To the extent that final design and construction activities would modify the Tentative Map, the Applicant shall adjust the site plan and grading to comply with this restriction by identifying feasible engineering/design solutions that can be implemented to avoid encroaching into the Riparian Corridor. To the extent that such engineering/design solutions may prove infeasible, the County shall require the applicant to fully avoid the impact by eliminating any such encroachments into the Riparian Corridor, and instead incorporating the remaining area into an open space parcel or Conservation Area. The following exceptions shall apply:

- a) Grading and construction activities necessary for bridge abutments as necessary to construct the bridge across Crow Creek shall be allowed. Compensation for the loss of native trees and other vegetation to be removed shall be achieved through implementation of a Riparian Restoration Plan.
- b) Grading and construction activities necessary for the storm drain outfall into Crow Creek shall be allowed. Compensation for the loss of native trees and other vegetation to be removed shall be achieved through implementation of a Riparian Restoration Plan.
- c) Prior to construction, permits shall be acquired by the applicant from CDFW for the bridge, outfall, and sandbag wall, and any encroachment into the Riparian Corridor. Similarly, permits shall be acquired from the CDFW, Corps, and RWQCB prior to constructing the outfall, or sandbag wall.

Bio-1b: Riparian Restoration Plan. The graded and undisturbed lands adjacent to and within the Riparian Corridor that will not be subject to development activity shall be enhanced through a re-vegetation, monitoring, and maintenance program. This program shall offset the loss of native trees and herbaceous riparian vegetation resulting from the development project. The goal of the Riparian Restoration Plan is to enhance and restore a self-sustaining riparian woodland habitat supporting native trees, shrubs, and grasses, including species previously eliminated from the area. Requirements for the Riparian Restoration Plan shall include the following:

- a) The Riparian Restoration Plan shall provide for a replacement ratio of a minimum of 10:1 for the loss of riparian woodland trees and/or riparian woodland under-story vegetation.
- b) All re-vegetation and restoration tasks shall be overseen by an ecological monitor, a qualified ecologist with experience in the areas of habitat restoration.
- c) All revegetation activities should be performed in the fall or winter months to enhance survival.
- d) Riparian woodland restoration would occur in the areas shown in Figure 5-5 of the Recirculated Draft EIR, on the peninsula of land south of (below) Lot 3, in the passive recreation area near the new bridge, in the recreation area identified immediately adjacent to (north of) Lot 27, and in identified locations along Crow Creek where riparian woodland enhancement opportunities are present. Other re-vegetation and restoration sites may be identified in coordination and consultation with the CDFW through the Fish and Game Code 1602 Streambed Alteration Agreement process required for this project.

- e) Riparian woodland restoration and enhancement activities shall proceed according to the requirements provided in Appendix C of the original Draft EIR. These restoration and enhancement requirements provide guidelines for planting, irrigation, maintenance and monitoring.

Bio-1c: Conservation Area. Prior to, or concurrent with the filing of final maps for the Project, all areas of the Riparian Corridor (with the exception of specific locations where development activities have been permitted) shall be described as a Conservation Area. The Conservation Area shall be preserved and managed in perpetuity for the conservation of biological resources.

- a) Means by which this Conservation Area may be preserved include placing these lands into a conservation easement that is granted by the landowner to a conservator that meets California and Civil Code Section 815, et seq., with the terms of the easement recorded/noticed on the property deed and included within the terms of the Codes, Covenants and Restrictions for the Project. Possible conservators include the CDFW or any other qualifying tax-exempt nonprofit organization which has as its primary purpose the preservation of open space as set forth at California Civil Code 815 et seq.
- b) Alternatively, the Conservation Area may be transferred in fee title to an entity that will protect the open space values of this area in perpetuity. Possible fee title owners of the Conservation Area include a homeowners association established for the Project, the County, the Park District (i.e., Hayward Area Recreation and Park District or East Bay Regional Park District), CDFW or other public agencies. If any owner is not a qualified conservation organization as set forth at California Civil Section 815 et seq., a conservation easement shall also be recorded over the Conservation Area by a conservation organization that meets the requirements set forth in California and Civil Code Section 815, et seq.
- c) A County Service Area, Landscape and Lighting District, assessment district or other such funding source shall be established to provide for a permanent and stable funding source for on-going maintenance and management of the Conservation Area, paid for by the Project property owners.
- d) The terms of the easement/title transfer shall be approved by the CDFW and any other applicable federal or state resource agency.

Bio-1d: Allowable Uses within the Conservation Area. Within the Conservation Area all development activity shall be prohibited, and allowable uses and management activities shall be limited to the following types/examples:

- a) Native and riparian vegetation restoration and enhancement
- b) Creek stability work as required by the Public Works Agency
- c) Selective tree pruning, selective removal of dead or dying vegetation that presents a fire hazard, and other selective fuels management activities as determined to be necessary by the Alameda County Fire Department to provide for adequate public safety and fire protection
- d) Passive recreation including pedestrian trails, seating facilities and nonstructural creek overlooks
- e) Mosquito abatement and other types of maintenance activities necessary to protect general health and safety

- f) Access for maintenance of the bridge, storm drain outfall structure, and fences (as applicable)
- g) Monitoring of cut and/or fill slopes for signs of instability or erosion, and necessary corrective actions as approved by Public Works

Bio-1e: Fencing. All private backyard spaces and/or publicly accessible space within the Project shall be separated from the Conservation Area by installation of a permanent fence. This fence should be designed as an attractive “view fence.” to accommodate views of the creek channel and otherwise enhance resident enjoyment of the creek while maintaining a permanent boundary for the Conservation Area. Any fence installed must be permanently maintained through a County Service Area, Landscape and Lighting District, assessment district or other such funding source that is established to provide for permanent and stable funding for on-going maintenance.

The Previous EIR concluded that implementation of mitigation measures **Bio-1a** through **Bio-1e** would reduce significant impacts on the Riparian Corridor to a less than significant level.

Subsequent Permitting Activities

Following certification of the Previous EIR in 2005, the then-project applicants filed for several required regulatory agency permits, as described below:

Clean Water Act Section 401 Certification, San Francisco Bay Regional Water Quality Control Board

In February of 2014, the RWQCB issued water quality certification for the fill of waters of the state in order to construct a new outfall to Crow Creek, and a new bridge over Crow Creek at the Project site, pursuant to an application to the RWQCB for Clean Water Act Section 401 Certification that the project will not violate state water quality standards.

The February 2014 Certification was premised on a project description derived from original application materials received from the then-applicant in 2006, a revised application received in April 2011, and supplemental application materials received in May and August 2011, January 2012, and June 2013. These application materials indicated the following details particularly relevant to the Riparian Corridor and riparian habitat:

- The approximately 4.1-acre Riparian Corridor will be protected by dedication of a conservation easement and/or ownership interest to a conservator agency or organization. The terms of the easement must be acceptable to the CDFW and the RWQCB. A funding mechanism shall also be established to assure adequate support for long-term management of the Riparian Corridor.
- Permanent impacts on 10 linear feet of the channel of Crow Creek, with impacts on a surface area of about 50 square feet (0.001 acre) resulting from placement of about 2.25 cubic yards of native rock and biotechnical erosion control measures needed for the proposed new storm drain outfall. About 2,500 square feet (0.06 acre) of the creek area will be temporarily impacted by the placement of 7.36 cubic yards of sandbags to create a coffer dam to keep creek waters away from the outfall construction site. The area dewatered by the coffer dam will extend over about 50 linear feet of channel.
- Construction of the new bridge across Crow Creek will result in the disturbance of about 4,500 square feet (0.1 acre) of riparian oak woodland area, extending over about 80 linear feet of channel, including the removal of eight native trees. The new bridge abutments will place 7

cubic yards of concrete at the top of the creek banks, over a surface area of 440 square feet (0.01 acre), extending along 40 linear of the creek channel.

- As mitigation for the fill of about 10 linear feet of waters of the State for the storm drain outfall, and disturbance of 0.1 acre of riparian oak woodland for construction of the new bridge, the application materials provided for on-site mitigation through implementation of the *Roberts Ranch Biological Restoration Plan* (Zentner and Zentner 2011) which identified:
 - approximately 0.31 acre of lower bank riparian woodland to be restored in currently un-vegetated areas and in areas that are currently occupied by non-native trees adjacent to the Creek;
 - approximately 0.54 acre of upper bank riparian oak woodland to be restored in areas that are presently dominated by non-native trees or are without tree cover; and
 - approximately 1.21 acres of existing riparian oak woodland to be enhanced in areas where tree cover is sparse and the understory is dominated by non-native species.

The RWQCB certification also requires compliance with a total of 35 conditions of the Water Quality Certification, including subsequent RWQCB approval of the language of the final Conservation Easement and the holder of the easement for the Riparian Corridor; subsequent RWQCB acceptance of the terms of the financial endowment fund or other form of financial assurance to be established for monitoring and perpetual management and maintenance of the mitigation features and habitat within the Riparian Corridor, as well as details regarding construction practices, planting requirements, maintenance and monitoring obligations, adherence to all conditions imposed by the CDFW pursuant to a Streambed Alteration Agreement issued for the Previously Approved Project, and other requirements.

Streambed and Lake Alteration Agreement, California Department of Fish and Wildlife

In March 2011, the then-applicants for the project submitted Notification to the CDFW of a Lake or Streambed Alteration Agreement. CDFW did not provide the applicants with a draft Agreement or inform them that an Agreement was not required, and as a result, the applicants were permitted by law to complete the Previously Approved Project as described in the notification without an Agreement. The Previously Approved Project as described in the notification included two elements within CDFW jurisdiction:

- A new single-span bridge crossing Crow Creek, connecting Crow Canyon Place to the Project site. The location of the bridge was chosen to minimize woodland loss and is just north of the location of a previous bridge that collapsed several years ago. The construction of the bridge requires channel clearing and vegetation management of the existing woodland area. The concrete bridge abutments will be placed well above the ordinary high water line to minimize impacts.
- A storm drain outfall constructed beneath the bridge. The storm drain outfall will require a portion of the Creek floodplains to be permanently filled for bank stabilization purposes. Bank stabilization techniques will include placement of native rock riprap at the bottom of the outfall and utilization of bio-engineered erosion control measures such as willow stakes on the slopes. Additionally, a temporary sandbag coffer dam will be needed to keep creek waters from the outfall construction site.

Construction of these two elements requires vegetation management and permanent disturbance of 0.1 acre (4,500 square feet), and temporary disturbance of 0.31 acre (13,500 square feet) of woodland area. Approximately 0.001 acre (50 square feet) of the creek floodplains will be permanently filled for bank

stabilization purposes and 0.06 acre (2500 square feet) of the floodplain bank will be affected by a temporary sandbag coffer dam. Mitigation for these impacts as described in the Notice to CDFW included:

1. During construction of the storm drain outfall, disturbance or removal of water/substrate from the channel will not exceed the minimum necessary to complete operations.
2. Work will be completed during the recommended "work window" of June 15 through October 15 to avoid the steelhead/rainbow trout migration and spawning season.
3. Excavation for and placement of fill will occur during low flow or dry weather conditions with a 72-hour prediction of no precipitation.
4. A focused survey for active nests of migratory birds will be conducted for any construction during the nesting season (February 1 to July 30) and pre-construction surveys will be conducted for California Red-legged frogs.
5. Orange construction fencing will be used to delineate the construction site and existing vegetation will be retained to the extent practicable.
6. Sediment control BMPs will include silt fencing, staked straw wattles, and defined entry and exit access points. BMPs will be inspected weekly.
7. A Stormwater Pollution Prevention Plan (SWPPP) and BMPs have been developed and approved by the RWQCB. A post-construction stormwater plan has also been developed for the project site.
8. The mitigation program will include habitat enhancement and restoration of riparian and oak woodlands and preservation of the creek and associated woodlands within a 4.1-acre Riparian Corridor. The mitigation program includes restoration of 0.31 acre of riparian woodland, all of which is within or directly adjacent to the creek floodplain and banks, the restoration of 0.54 acre of oak woodland and the enhancement of 1.21 acres of oak woodland. The Riparian Corridor will provide a habitat buffer averaging more than 50 feet (20 to 150 feet) beyond the banks of the creek. Mitigation work will include management of the restored habitat for 10 years after construction.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. All grading and construction activities for the residential development would occur outside the Riparian Corridor (see **Figure 4**), and the Conservation Easement Area has been expanded from 182,754 square feet (approximately 4.1 acres) to 187,998 square feet (approximately 4.3 acres), or an increase in the total Conservation Easement area of 5,244 square feet. Similar to the Previously Approved Project, the Roberts Ranch Project proposes to construct a single-span bridge across Crow Creek and a new storm drain outfall within the creek, and the related impacts on riparian habitat would be similar to those discussed in the Previous EIR. Mitigation measures from the Previous EIR still apply to the Roberts Ranch Project, as indicated below:

- **Bio-1a: Restricted Development within the Riparian Corridor** is still applicable, but site plan and the grading plan for the Project have been designed to comply with the Riparian Corridor restriction by avoiding encroachment into the Riparian Corridor (see **Figure 5**). The obligation to acquire permits from the CDFW, Corps, and RWQCB for the bridge, outfall and sandbag wall remain, but have been substantially met through permit processes subsequent to the County's prior 2005 Project approvals.



Figure 4
Roberts Ranch Project - Grading Plan

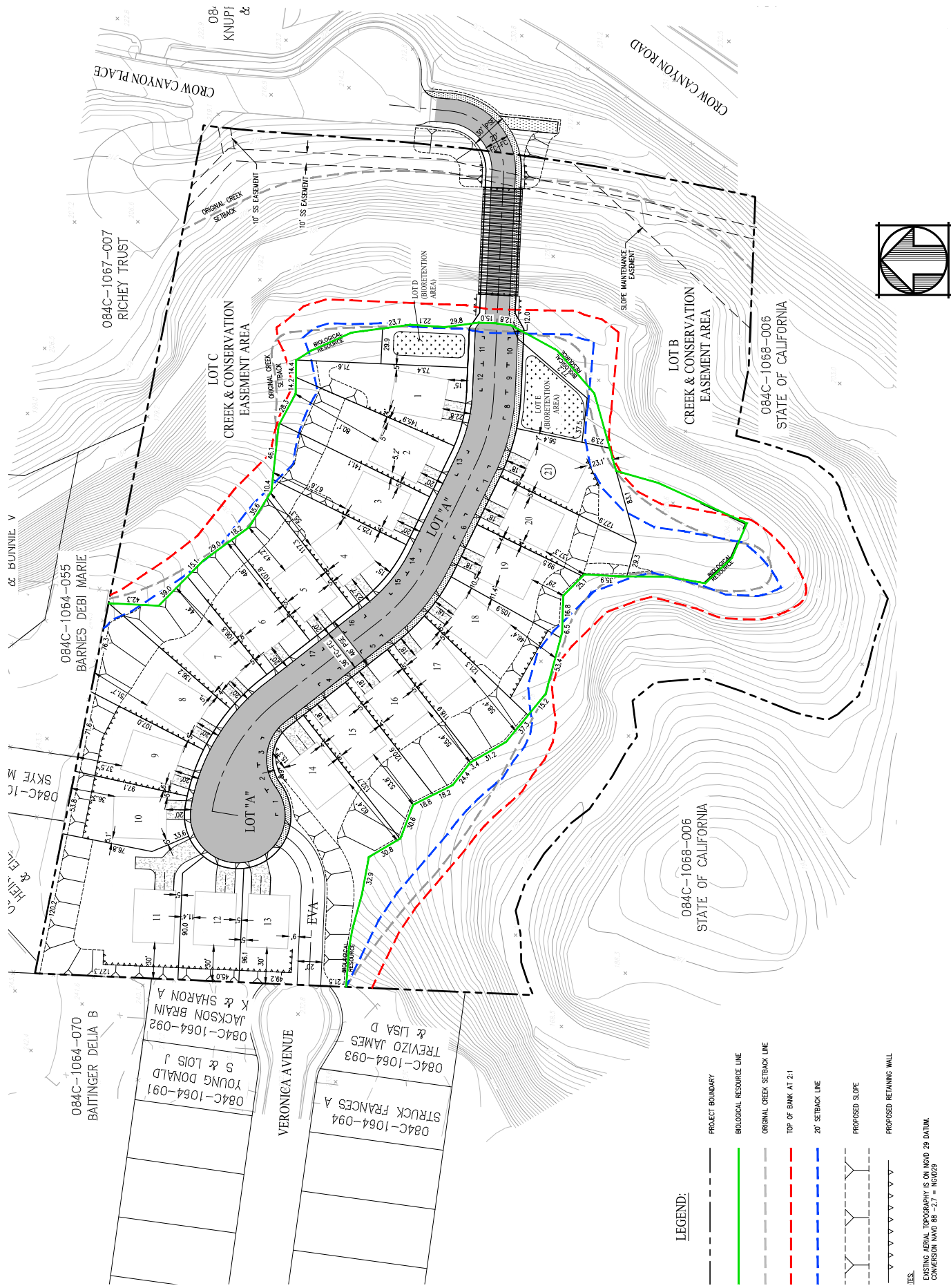


Figure 5
 Roberts Ranch Project - with Riparian and Creek Setbacks Shown

- **Bio-1b: Riparian Restoration Plan** remains applicable, but has been met through preparation of the *Roberts Ranch Biological Restoration Plan* (Zentner and Zentner 2011) as submitted to the RWQCB. This Restoration Plan identifies approximately 0.31 acre of lower bank riparian woodland to be restored in areas that are currently un-vegetated and/or occupied by nonnative trees adjacent to the creek; approximately 0.54 acre of upper bank riparian oak woodland to be restored in areas that are dominated by nonnative trees or areas without tree cover; and approximately 1.21 acres of existing riparian oak woodland to be enhanced in areas where tree cover is sparse and the understory is dominated by nonnative species.
- **Bio-1c: Conservation Area** also remains applicable. The means by which the Conservation Area will be preserved by granting a conservation easement to a conservator meeting qualifications defined in California and Civil Code Section 815, et seq., has not yet been determined.
- **Bio-1d: Allowable Uses within the Conservation Area** also remains applicable, and will need to be established within the terms of the Conservation Easement.
- **Bio-1e: Fencing** also remains applicable to the Roberts Ranch Project and subject to County's final Design Review approval.

The RWQCB has indicated that the current applicant, as a new party to the prior Certification, must apply to the RWQCB to revise the certification and identifying the new party as the Applicant. Additionally, CDFW has indicated that if the applicant proceeds with this Project, it must be the same as described and conducted in the same manner as specified in the prior Notification, including completing the Project within the proposed term and seasonal work period, and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the Notification. If the term proposed in the Notification expires, the applicant will need to re-notify CDFW before beginning the Project.

There are no changes in the Roberts Ranch Project that would result in a new or substantial increase in the severity of previously identified impacts on riparian habitat or sensitive natural communities beyond those disclosed in the Previous EIR. Whereas there is now new information relative to the RWQCB Certification and the CDFW requirements pursuant to the Streambed Alteration Agreement Notice regarding the conditions by which the Riparian Corridor shall be preserved and maintained, and the means by which impacts resulting from construction of the new bridge and storm drain outfall shall be mitigated, this new information does not result in a new or substantial increase in the severity of previously identified impacts on riparian habitat or sensitive natural communities beyond those disclosed in the Previous EIR. Overall, there would be no new impacts on riparian habitat or sensitive natural communities beyond those identified in the Previous EIR.

Wetlands, Water Quality, and Fish Habitat

Previous EIR Conclusions

As discussed in Previous EIR (Chapter 5, Section 5.4), Crow Creek is a regulated water under the jurisdiction of the RWQCB and the Corps. Although no dredge material is proposed to be discharged into the creek, construction activities would include a storm drain outfall requiring the placement of erosion control measures that would permanently impact Crow Creek below the ordinary high water mark, and temporary fill for dewatering purposes. Therefore, the Previous EIR indicated that the Previously Approved Project is subject to Corps/RWQCB jurisdiction and permit processes. The Previous EIR also found that development of the site with residential uses near the creek may result in water quality impacts on the creek. Lack of treatment of stormwater runoff prior to its entry into the creek could

impact water quality and fish habitat due to potentially harmful materials carried in stormwater runoff both during and after construction, which would be a significant impact.

Mitigation measures found in the Hydrology chapter of the Previous EIR (see further discussion on this topic in the Hydrology section of this Addendum) were adopted for the approved project to address the biological-related issues of water quality and potential fish habitat, including:

- **Hydro-1a: Stormwater Pollution Prevention Plan Regulatory Compliance**
- **Hydro-1b: Storm Water Quality Control Plan (SWMP) BMPs**
- **Hydro-1c: RWQCB Water Quality Certification**
- **Hydro-2a: Post-Construction BMPs**
- **Hydro-2b: Post-Construction BMP Design Criteria**

Additionally, the Previous EIR recommended avoidance of the Riparian Corridor as an additional measure to address water quality impacts.

Subsequent Permitting Activities

Following certification of the Previous EIR in 2005, the then-project applicants filed for several required regulatory agency permits, as described below:

Section 404 Nationwide Permits – U.S. Army Corps of Engineers

As of September 2014, the Corps issued a reauthorization letter to the then-applicants applicants of the project indicating that the project qualifies for authorization under Department of the Army NWPs 7- Outfall Structures, and 33- Temporary Construction, Access and Dewatering, pursuant to Section 404 of the Clean Water Act. The Project must be implemented in compliance with the terms of the NWP, the general conditions of the NWP Program, and applicable San Francisco District RWQCB conditions, as well as any special conditions cited in their prior (June 2012) NWP authorization, to remain valid. The September 2014 verification remains valid until March 2017, unless the NWP authorization is modified, suspended, or revoked.

Clean Water Act Section 401 Certification, San Francisco Bay Regional Water Quality Control Board

In February of 2014, the RWQCB re-issued their latest water quality certification pursuant to an application from the then-applicants for Clean Water Act Section 401 Certification that the Project will not violate state water quality standards (see further discussion on this topic in the Hydrology section of this Addendum).

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Avoidance of the Riparian Corridor has been incorporated into the design of the Roberts Ranch Project. Mitigation measures **Hydro-1a: Stormwater Pollution Prevention Plan Regulatory Compliance, Hydro-1b: Storm Water Quality Control Plan BMPs, Hydro-1c: RWQCB Water Quality Certification, Hydro-2a: Post-Construction BMPs, and Hydro-2b: Post-Construction BMP Design Criteria**, all remain applicable to the Roberts Ranch Project, but many of these mitigation obligations (i.e., the preparation of a Storm Water Quality Control Plan, RWQCB Water Quality Certification, and post-construction BMPs and BMP design criteria) have been satisfied through permits obtained from the RWQCB and Corps). These permits and certifications may need to be modified or amended for the

Project to reflect an updated design or new applicant. With implementation of these mitigation measures, impacts on wetland, water quality, and fish habitat would be less than significant.

There are no changes in the Project that would result in a new or substantial increase in the severity of previously identified impacts on wetland, water quality, and fish habitat beyond those disclosed in the Previous EIR. Whereas there is now new information relative to the RWQCB Certification and the Corps NWP permit (see further discussion under the Hydrology section of this document) this new information does not result in a new or a substantial increase in the severity of previously identified impacts on wetland, water quality, and fish habitat beyond those disclosed in the Previous EIR. Overall, there would be no new impacts on wetland, water quality, and fish habitat beyond those identified in the Previous EIR.

Wildlife Movement

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 5, Section 5.4), Crow Creek is a movement corridor for local wildlife. Construction activities in and along Crow Creek may inhibit wildlife movement (e.g., deer, small mammals, amphibians and reptiles) through this corridor. Most of the species currently using the creek would likely continue to do so during the evening and night, even after project implementation; however, any construction barriers left in Crow Creek during construction would potentially create significant wildlife movement restrictions and were considered a potentially significant impact. The following mitigation measures were recommended in the Previous EIR to reduce impacts on wildlife movement:

Bio-3a: Bridge Construction Barrier Removal. During construction of the bridge, ensure that no barriers are constructed across the creek and left in place overnight. Reduce disturbance of native ground cover and the soil surface to the maximum extent practicable.

Bio-3b: Construction Period. No construction work will be allowed in the Creek or riparian woodlands between October 15 and April 15, with the exception of planting or related activities. Bridge construction activities will be concluded between June 15 and October 15, when steelhead are not expected to be in this reach of Crow Creek, or as otherwise conditioned by the National Marine Fisheries Service (NMFS). In addition, BMPs will be employed during construction to minimize and/or prevent water quality impacts on Crow Creek. Silt fencing backed by hay bales will be installed along the top-of-bank to prevent sediment or construction materials from rolling down the banks. In addition, a hammock, or similar material, will be deployed over the creek during construction to capture any debris that could fall into the creek.

Bio-3c: Creek Area Construction Requirements. All work conducted within the stream channel (i.e., rock slope protection placement and bridge construction) shall be conducted during times of low flow. Cofferdams should be used to divide the construction zone from the centerline of the creek to avoid interrupting flows during construction. Engineering plans should designate grading and construction areas including site access, equipment access, and staging areas that minimize disturbance to riparian vegetation.

Bio-3d: Bridge Lighting. Lighting on the bridge shall be designed so that all street lights consist of modified beam lights that are directed down onto pavement sections only, and that specifically do not illuminate the surrounding environment.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Similar to Previously Approved Project, the Roberts Ranch Project proposes to construct a single-span bridge across Crow Creek. The related impacts on wildlife movement would be similar to those discussed in the Previous EIR and would remain potentially significant.

Mitigation measures **Bio-3a: Bridge Construction Barrier Removal**, **Bio-3b: Construction Period**, **Bio-3c: Creek Area Construction Requirements**, and **Bio-3d: Bridge Lighting** remain as required mitigation for the Roberts Ranch Project. Many of these mitigation measures have now been more specifically addressed in the subsequent permits from regulatory agencies that have obtained since County certification of the Previous EIR (see further discussion under Hydrology). Consistent with the conclusions of the Previous EIR, implementation of these measures would reduce impacts to a less than significant level.

There are no changes in the Project that would result in a substantial increase in the severity of previously identified impacts on wildlife movement beyond those disclosed in the Previous EIR. Whereas there is now new information relative to the RWQCB Certification and the Corps NWP permit (see further discussion under the Hydrology section of this document) this new information does not result in a new or a substantial increase in the severity of previously identified impacts on wildlife movement beyond those disclosed in the Previous EIR.

Conflict with Biological Resource Protection Policies and Ordinances

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 5, Section 5.4), construction activities would include vegetation removal and grading on the site, resulting in substantial tree loss (144 trees, including 60 native trees). This tree loss would potentially conflict with the Alameda County Tree Protection Ordinance. This impact was found to be potentially significant. The following mitigation measures were recommended in the Previous EIR to reduce impacts related to tree removal and their potential conflicts with biological resource protection policies and ordinances:

Bio-2a: Minimizing the Loss of Non-Riparian Native Trees. Grading and construction activities outside the Riparian Corridor shall occur such that the loss of native trees is minimized to the greatest extent feasible. Feasibility (as used in this context) is defined as solutions that can be implemented to save a native tree without requiring a change in the proposed site plan, lot location, or grade elevation. Compensation for the loss of native trees that are not located within the Riparian Corridor and that cannot be feasibly saved and must be removed shall be achieved through implementation of the Native Tree Replacement Plan. Non-native trees outside the Riparian Corridor may be removed at the discretion of the developer.

Bio-2b: Native Tree Replacement Plan. Lands adjacent to and within the Riparian Corridor shall be enhanced through a re-vegetation, monitoring, and maintenance program to offset the loss of native trees as a result of the development project. The goal of the Replacement Plan is to enhance and restore a self-sustaining woodland habitat supporting native trees, shrubs, and grasses. Requirements for the Native Tree Replacement Plan shall include the following:

- The native tree restoration and enhancement plan shall provide for a minimum of a 2:1 replacement ratio for loss of native trees.

- All re-vegetation activities shall be overseen by an Ecological Monitor, a qualified ecologist with experience in the areas of habitat restoration.
- All revegetation activities should be performed in the fall or winter months to enhance survival.
- Native tree replacement shall occur in the areas (shown in Figure 5-5 of the Previous EIR) in the oak woodland planting zone, the upper portions of the existing eucalyptus patches, and the woodland enhancement zone areas. Other revegetation and restoration sites may be identified in coordination and consultation with the CDFW.
- Restoration and enhancement activities shall proceed according to the requirements provided in Appendix C of the original Draft EIR. These restoration and enhancement requirements provide guidelines for planting, irrigation, maintenance, and monitoring. Salient points of restoration include:
 - All planted native trees shall include installation of an irrigation system. The irrigation system shall have all irrigation valves wired to clocks that will facilitate consistent, regular watering.
 - Irrigation will occur over a three to four-year establishment period and terminated in the fall of the third or fourth year. A restoration ecologist shall determine when irrigation should be cut back and then terminated.
 - Monitoring shall occur over a ten-year period.
 - Alameda County, the CDFW, and the RWQCB shall be provided with annual monitoring reports.
 - At the end of the 10-year monitoring period at least 90 percent of the installed plants shall be healthy or else replanting and subsequent establishment irrigation shall be required for an additional three years.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The Project would further reduce the total grading area and construction envelope, as well as the overall number of proposed lots. Similar to the Previously Approved Project, vegetation removal and grading activities for the Roberts Ranch Project would still result in substantial tree loss (native and nonnative), and the related impacts would be similar to those discussed in the Previous EIR, and would remain potentially significant.

Mitigation measures **Bio-2a: Minimizing the Loss of Non-Riparian Native Trees** and **Bio-2b: Native Tree Replacement Plan** remain applicable for the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of these mitigation measures would reduce impacts to a less than significant level.

There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to conflicts with biological resource protection policies and ordinances beyond those disclosed in the Previous EIR. Overall, there would be no new impacts regarding tree removal over those identified in the Previous EIR.

Conflict with Habitat Conservation Plan or Natural Community Conservation Plan

Please refer to the Land Use and Planning section of this addendum for discussion of impacts particular to potential conflicts with a habitat conservation plan or a natural community conservation plan.

Conclusions – Biological Resources

Based on an examination of the analysis, findings, and conclusions of the Previous EIR and subsequent regulatory permit conditions and requirements, implementation of the Roberts Ranch Project would not substantially increase the severity of significant biological resource impacts identified in the Previous EIR, nor would it result in new significant impacts related to biological resources that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to biological resources not previously discussed.

Although the previous project applicant obtained and renewed permits for the project as approved in 2005, the new applicant would be responsible for obtaining revised permits (as may be required by those agencies) for the Project. The Roberts Ranch Project would need to comply with any and all current or updated requirements, terms, and conditions in these permits.

VI. Cultural Resources

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions of the Project site remain generally unchanged from the Previous EIR.

Historical Resources

Previous EIR Conclusions

The Previous EIR (Chapter 6) explored the potential presence of structural and non-structural historic resources on the site, and found that none of the structures on the property met the criteria of significance necessary to be deemed an historical resource. This assessment included an evaluation and a negative conclusion as to whether a Stratton’s Blue Gum Forest or other derivative of the former blue gum eucalyptus forest in the vicinity met the criteria of significance necessary to be deemed historical. The Previous EIR found that potential impacts on historical resources resulting from development of the site would be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because the structures previously evaluated have since been removed from the site, development of the Project would have no substantial effect on historical resources. Similar to the conclusions in the Previous EIR, the impact of the Roberts Ranch Project on historical resources remain less than significant. Consistent with the conclusions of the Previous EIR, the Project would not result in

a significant new impact on historical resources. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on historical resources beyond those disclosed in the Previous EIR.

Archaeological and Paleontological Cultural Resources

Previous EIR Conclusions

The Previous EIR (Chapter 6) included a complete discussion and analysis of archaeological resources at the Project site and in the Project vicinity. A records search and archaeological survey were conducted. At the time of preparation of the Previous EIR, tribal consultation pursuant to AB 52 was not required, as the legislation had not yet been introduced. However, consultation with the Native American Heritage Commission and neighboring tribes was required under Government Code Sections 65351 and 65352 to help identify and protect tribal cultural resources, and the Native American Heritage Commission was contacted for a search of the Sacred Land Inventory. The results of this research indicated that no prehistoric or historic archaeological sites had been recorded on the Project site, and that no known ethnographic or contemporary Native American resources, including sacred places, or traditional or contemporary use areas had been identified on the Project site. Based upon the additional research, the impact of the Previously Approved Project on tribal cultural resources was found to be less than significant.

One prehistoric archaeological site was previously recorded adjacent to the Project site, but the Previous EIR concluded that construction activities associated with the Previously Approved Project would not destroy any sensitive contextual information associated with this nearby archaeological site. The research that was conducted indicated that the Project site has a very high sensitivity for archaeological resources (based on the known location of other recorded prehistoric and historic archaeological sites within a mile of the project area, and the presence of a known archaeological site adjacent to the property), and proximity to Crow Creek. Therefore, the Previous EIR held that the possibility exists for discovery and potential disturbance of unknown archaeological resources during construction activities, potentially resulting in the loss of integrity of such resources. This impact was found to be potentially significant. The following mitigation measures were recommended in the Previous EIR to address this potential impact:

Archeo-1a: On-Call Archaeologist. Prior to the initiation of construction or ground-disturbing activities, the Project applicant shall retain a professional archaeologist to remain on-call throughout any Project ground-disturbing construction activities for consultation and the review and evaluation of any unexpected discoveries of significant archaeological resources. The on-call archaeologists shall also inform all personnel connected with construction of the Project of the possibility of finding archaeological resources (e.g., human remains, artifacts, bedrock, bone, or shell).

Archeo-1b: Monitoring. Archaeological monitoring of subsurface construction shall occur during surface clearing, grading, and excavations for the proposed bridge abutments, the storm drain outfall, and for utilities and sewers. Monitoring on either a full-time or intermittent basis shall be up to the discretion of the Project Archaeologist depending on their assessment of the potential for the exposure of significant archaeological resources.

Archeo-1c: Archaeological Discovery. If such resources are encountered during construction, all work will be halted with a 30-foot radius of the findings and a qualified archaeologist shall be

retained to ascertain the nature of the discovery. Mitigation measures recommended by the archaeologist and approved by the Planning Director shall be implemented.

Archeo-1e: Archaeological Monitoring Closure Report. An Archaeological Monitoring Closure Report shall be completed by the Project Archaeologist upon the completion of monitoring. A copy shall be filed with the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park (California Historical Resources Information System/Northwest Information Center) and with the Director, Alameda County Development Planning.

Archeo-1f: California Department of Transportation Notification. Prior to initiating grading or construction activities, the Applicants shall notify the California Department of Transportation (Caltrans) of their intent to develop the Project site in order to promote proper stewardship of a recorded archaeological site. The Applicants shall also submit a set of development plans to Caltrans that show the Project boundaries, and encourage Caltrans to implement adequate access barriers to their property.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Although there are no known archaeological or other cultural resources on the site, the potential continues to exist for grading and other ground-disturbing construction activities to result in the accidental discovery of such resources. The impacts of the Roberts Ranch Project on cultural and archaeological resources would be similar to those discussed in the Previous EIR, and would remain potentially significant. Mitigation measures **Archeo-1a**, **Archeo-1b**, **Archeo-1c**, **Archeo-1e**, and **Archeo-1f** as recommended in the Previous EIR would continue to apply to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of these mitigation measures would reduce impacts to a less than significant level.

There are no changes in the Project or in circumstance, nor is there any new information that would result in a new, or substantial increase in the severity of previously identified archaeological resources impacts beyond those disclosed in the Previous EIR.

Human Remains

Previous EIR Conclusions

The Previous EIR (Chapter 6) found that there is no known interment of human remains on the site, but that the potential exists for accidental discovery of human remains, and that such discovery during construction activity could be a potentially significant impact. To address the potential impacts of the disturbance of human remains, mitigation measures **Archeo-1a**, **Archeo-1b**, **Archeo-1c**, **Archeo-1e**, and **Archeo-1f** described above, as well as **Archeo-1d** (below) are required to be implemented.

Archeo-1d: Human Remains. Additionally, if human remains are found within the Project area, State law (CEQA Section 15064.5 and the Health and Safety Code Section 7050.5) requires the following steps to be taken:

- There shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until the County Coroner is contacted;

- If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours;
- The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent;
- The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods.

With implementation of these mitigation measures, impacts related to the potential discovery of human remains would be reduced to levels of less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Although there are no known human remains on the site, the potential exists for grading and other ground-disturbing construction activities to result in the accidental discovery of human remains. The impacts of the Project on human remains would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measures **Archeo-1a**, **Archeo-1b**, **Archeo-1c**, **Archeo-1d**, **Archeo-1e**, and **Archeo-1f** recommended in the Previous EIR to address the potential impacts of the accidental discovery of human remains remain applicable to the Roberts Ranch Project as required under State law. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Archeo-1a**, **Archeo-1b**, **Archeo-1c**, **Archeo-1d**, **Archeo-1e**, and **Archeo-1f** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on human remains beyond those disclosed in the Previous EIR.

Conclusions – Cultural Resources

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant cultural resources impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to cultural resources not previously discussed.

VII. Geology and Soils

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Expose people or structures to substantial risk of loss, injury, or death involving:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards 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 Publications 42?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18 - 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Ground Rupture

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), the site is within the Alquist–Priolo Special Study Zone. The Hayward Fault lies approximately two miles to the southwest and the Calaveras Fault lies approximately four miles to the northeast; however, there are no faults mapped across or trending beneath the Project site. Project development would not expose people or property to ground rupture; therefore, no impact is expected.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would not lie atop any mapped faults; therefore, no impact is expected.

Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to ground rupture. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to ground rupture beyond those disclosed in the Previous EIR.

Seismic Ground Shaking

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), the closest active fault to the site is the Hayward Fault, approximately two miles to the southwest. Thick, loose materials such as those found in the Project area tend to amplify and prolong ground shaking during a seismic event and result in severe damage. Project development could expose people or property to ground shaking, which is considered a potentially significant impact.

All development would be subject to compliance with the California Building Code. In addition, all future development on the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study⁷, the Slope Stability Assessment⁸, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.

The following mitigation measures were recommended in the Previous EIR to reduce the impacts from seismic ground shaking to a level of less than significant:

Geo-1a: Criteria for Foundation Design. All building foundation design shall be subject to compliance with the California Building Code. In addition, development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to the following:

- The footings should be at least 12 inches in width. In addition, footings located adjacent to utility trenches should have their bearing surfaces below an imaginary one horizontal to one vertical plane projected upward from the bottom edge of the trench.
- The foundations may be designed for an allowable axial soil bearing pressure of 1,500 pounds per square foot for dead plus live load, with a one-third increase for any transient load (including wind or seismic).
- All footings for a given structure should bear either on two or more feet of soil or entirely on rock. The weight of foundation concrete below grade may be neglected in sizing computations. All footings should be reinforced as required by the structural designer to provide structural continuity, to permit strong spanning of local irregularities, and to be rigid enough to accommodate potential differential movements on the order of one-half inch over 20 lineal feet.
- The foundation excavations should be clean (i.e., free of all loose slough) and dry prior to placing steel and concrete. Concrete should be pumped or placed by means of a tremie or elephant's trunk to avoid aggregate segregation and earth contamination (i.e., concrete should not be chuted against the excavation sidewalls) for excavations over five feet deep.

⁷ prepared by Earthtec Ltd. in March 2004

⁸ prepared by Earthtec Ltd. in April 2004

- Structural stability of the rebar reinforcement should be maintained during concrete placement to prevent buckling. The concrete should be properly vibrated to mitigate formation of voids and to promote bonding of the concrete to steel reinforcing.

Geo-1b: Lateral Resistance. Resistance to lateral forces could be computed by either frictional resistance or passive pressure; if both are combined, then the lesser should be reduced by 50 percent. An allowable friction factor of 0.17 is estimated between the surface of mass concrete and the adjacent soil; or, for rock, 0.35. Allowable passive earth pressure applied against vertical faces of the foundation is estimated to be about 175 pounds per cubic foot (equivalent fluid pressure).

Geo-1c: Slab-on-Grade Floor Support. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to:

- The sub grade soils should be maintained at 2 to 4 percent above the compaction moisture content, as affirmed by the Geotechnical Engineer within 24 hours of slab concrete placement.
- The floor slabs should not be placed on a dry sub grade. The slabs should be designed to float—move differentially with respect to the footings.
- Slab thickness and reinforcement should be as required by the structural designer, based on an estimated modulus of sub grade reaction of 100 psi/in.
- The floor slabs should be underlain by a 4-inch thick layer of crushed washed rock which is intended to serve as a capillary moisture break and to provide uniform slab support. Gradation of this material should be such that 100 percent will pass a 1-inch sieve and 0 to 5 percent passes the No. 4 sieve. We recommend a 10-mil moisture vapor barrier (sealed at all laps, splices, penetrations, etc.) be placed above the gravel moisture break. The vapor barrier should extend laterally into the footings. If maximum two-inches of sand should be placed above the membrane, then we recommend a moisture barrier be placed against the outer face of the perimeter footing. Further resistance to moisture vapor intrusion could be achieved with proper curing of the concrete, adding a sealant to the mix (e.g., Moxie), having a mix design with low slump (we suggest 2 to 4 inches), low water/cement ratio (we suggest not greater than 0.45), and high strength (we suggest at least 4000 psi). The exterior ground surface should be at least 6 inches below the top of the floor slab.
- All surfaces should slope to drain away from all sides of each building.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would be near the known active Hayward Fault. The impacts from seismic ground shaking for the Project would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measures **Geo-1a: Criteria for Foundation Design**, **Geo-1b: Lateral Resistance**, and **Geo-1c: Slab-on-Grade Floor Support** recommended in the Previous EIR to address the potential impacts from seismic ground shaking remain applicable to the Project. Consistent with the

conclusions of the Previous EIR, implementation of mitigation measures **Geo-1a: Criteria for Foundation Design**, **Geo-1b: Lateral Resistance**, and **Geo-1c: Slab-on-Grade Floor Support** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to seismic ground shaking beyond those disclosed in the Previous EIR.

Liquefaction

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), liquefaction occurs when cohesion-less soils (high silt, sand, or fine gravel content soils) are transformed by seismic shaking into a viscous fluid state causing ground failure and structural damage. Based on the conclusions of the liquefaction assessment conducted for the Previously Approved Project, the sand layer which underlies portions of the site (lots 9 through 12) appears to present a low-to-moderate potential for liquefaction during a major seismic event in conjunction with an unusually high groundwater level. The Previously Approved Project would pull lots 9, 10, 11, and 12 further north and away from the existing creek as compared to the Original Project; however, their location would still be above the silty sand lens, and the potential for liquefaction would be approximately the same. Future development on these portions of the site could expose people or property to damage associated with liquefaction, which is considered a potentially significant impact.

The following mitigation measure was recommended in the Previous EIR to reduce the impacts from liquefaction to a level of less than significant:

Geo-2: Foundation Design, Liquefaction Potential. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to reinforced shallow foundations (post-tension slabs) for homes on lots 9 through 12, and slope buttressing along the edge of Crow Creek.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would still be above the silty sand lens, although the affected lots would change (lots 16, 17, 18, and 19 per the current tentative map). The impacts from liquefaction for the Roberts Ranch Project would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measure **Geo-2: Foundation Design, Liquefaction Potential** recommended in the Previous EIR to address the potential impacts from liquefaction remains applicable to the Roberts Ranch Project as modified to reflect the revised site plan:

Geo-2: Foundation Design, Liquefaction Potential. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with

these reports, foundation designs may include, but shall not be limited to reinforced shallow foundations (post-tension slabs) for homes on lots ~~9-16~~ through ~~12-19~~, and slope buttressing along the edge of Crow Creek.

Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Geo-2: Foundation Design, Liquefaction Potential** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to liquefaction beyond those disclosed in the Previous EIR.

Landslides/Slope Failure

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), no landslides have been mapped on the site, and there are no slopes in the vicinity that possess significant landslide potential to the site. Project construction, however, would occur on slopes that could become unstable during a major seismic event. Additionally, construction would include extensive cut and fill grading that could create new, unstable soil conditions on the site, which is considered a potentially significant impact. The Previously Approved Project would not require large fills extending down the banks of Crow Creek and no construction would occur within the Riparian Corridor.

The following mitigation measures were recommended in the Previous EIR to lessen the threat of slope instability during a major seismic event and reduce the impacts from landslides and slope failure to a level of less than significant:

Geo-3a: Deepened Footings. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.

Structures whose footings are on or within fifteen feet of the slope should be deepened and stepped down as designed by the structural designer such that the bottom of the footing is below an imaginary horizontal line projected into the slope at a point that is five feet downhill along the ground surface from where the downhill vertical face of the footing intercepts the slope face.

Geo-3b: Erosion Control. Slopes shall be protected from erosion as designed by a Civil Engineer and/or landscape architect. Even though water from surface and/or groundwater sources would be controlled and/or diverted to the storm drain system, there is unknown potential for instability to occur due to outside influences such as natural weathering, prolonged heavy torrential rainstorms and/or continued cutting into the toe of the slope by the creek.

Geo-3c: Monitoring. After all construction activity is complete, the slopes shall be monitored by a certified geotechnical engineer or engineering geologist. The lowest level of monitoring would be a site reconnaissance after a significant seismic event to determine, based on observation of surficial features, if slope instabilities appear imminent, or have occurred. A higher level of monitoring would be the field reconnaissance together with the surveyor setting monuments and resurveying them to check for movements (both lateral and vertical).

Geo-3d: Retaining Wall Design. Specific geotechnical design parameters for all retaining walls along the edge of slopes, shall be determined when the source of fill is established, and after testing of that fill has been performed. Any retaining wall design shall be subject to the recommendations of the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, the following is tentative criteria for design of the walls and subject to modification upon further Project earthwork definition:

- Retaining walls should be designed to be capable of moving, such that the top of the wall is free to deflect or rotate at least 0.1 percent of the wall height if subjected to an ultimate active earth pressure of 31 pounds per cubic foot (pcf), equivalent fluid pressure. If a wall cannot move the required amount, then the wall should be designed to resist an ultimate at-rest earth pressure of 50 pcf for granular material, for equivalent fluid pressure. The preceding values are predicated on complete drainage of the wall backfill. Surcharge loads from adjacent permanent construction, building foundations, construction activities, traffic, slopes, etc., also should be taken into consideration.
- Drainage of the walls should be accomplished using a full wall drainage blanket or a pre-manufactured wall drainage system. The drainage blanket materials, if selected for use, should consist of Class 2 permeable material per Section 68-1.025 of the Caltrans Standard Specifications. The drainage blanket should be at least 12 inches thick and placed to within 12 inches of the top of the wall. The drainage rock should be enveloped in geotextile drainage fabric. The fabric should be installed per the manufacturer's criteria. Water collected at the bottom of the drainage blanket may be transmitted away from the wall by a perforated pipe or weep holes. The pipe should be at least four inches in diameter with the perforations placed down on top the geotextile fabric. The pipe should daylight at a lower grade line, or connect to a sump, storm drain or other suitable disposal facility. Weep holes should be at least two inches in diameter and spaced not more than six feet on centers.
- Wall backfill within the zone defined by a plane sloping up from the bottom of the wall at 1 Horizontal: 1 Vertical should be constructed as engineered fill using a select, non-expansive, granular soil. Care should be taken to avoid excessive pressures against walls during backfilling, and it is recommended that walls be braced during the backfilling operation. The backfill should be compacted to at least 90 percent relative compaction per ASTM D 1557.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Similar to the Previously Approved Project, Project construction would include extensive cut and fill grading, but would be slightly less due to the reduction of total grading quantity by approximately 6,000 cubic yards. The landslide and slope failure impacts resulting from construction of the Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. The mitigation measures **Geo-3a: Deepened Footings**, **Geo-3b: Erosion Control**, **Geo-3c: Monitoring**, and **Geo-3d: Retaining Wall Design** recommended in the Previous EIR to address the potential impacts from landslides and slope failure remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Geo-3a: Deepened Footings**, **Geo-3b: Erosion Control**, **Geo-3c: Monitoring**, and **Geo-3d: Retaining Wall Design** would reduce impacts to a less than significant level. There are no changes in the Project or in

circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to landslides and slope failure beyond those disclosed in the Previous EIR.

Soil Erosion/Loss of Topsoil

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), soil erosion and loss of topsoil may occur with the construction of the subdivision. Grading and other construction-related activities would disturb the soil, which could increase soil erosion rates. All disturbed soil is subject to erosion. Land clearing, grading, cut and fill operations, other site preparation activities, and installation of impervious surfaces would increase the risk of soil erosion and loss of topsoil, which is a potentially significant impact.

The Previously Approved Project would be required to comply with a NPDES General Permit. In addition, as a part of the approval process, the applicant must submit a SWPPP and otherwise comply with all standards and regulations of the State Water Resources Control Board.

The following mitigation measures were recommended in the Previous EIR to reduce the soil erosion impacts to a level of less than significant:

Geo-4a: Site Clearing and Stripping. The construction area should be clear of all obstructions including any existing fill, vegetation, debris, rubble, rubbish, and any loose, wet, soft or disturbed soils. Any pits, cisterns, septic tanks, leach fields, etc., that might be encountered, should also be cleaned out and/or removed. Trees to be removed should have their entire root bowls cleared of all roots and loose soils.

- All excavations resulting from the clearing operations should be cleared to expose firm, undisturbed earth material and backfilled with approved compacted earth materials.
- In conjunction with clearing, the building and pavement areas should be stripped to sufficient depth to remove all organic laden topsoil. The actual stripping depth should be determined by our representative at the time of construction. The cleared and stripped materials should be removed from the site or stockpiled for possible use as landscape materials.

Geo-4b: Slopes and Drainage. Permanent excavation and embankment slopes in soil should be graded at an inclination of 2 horizontal to 1 vertical (2:1) or flatter. The crowns of all slopes should be constructed so that surface runoff water is not allowed to flow over the faces of the slopes.

- Soils are considered moderately susceptible to erosion where drainage concentrations occur. The rock is considered to have low susceptibility to erosion.
- Concentrated flowing water should be either dissipated or channeled to appropriate discharge facilities, as determined by the general Civil Engineer and shown on his erosion and grading plan.
- Positive surface gradients should be provided adjacent to the buildings and pavement areas to direct surface water away from the foundations and pavements toward suitable discharge facilities.
- Ponding of surface water should not be allowed on or adjacent to the pavement.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would result in fewer lots than the Previously Approved Project and less impervious surface area overall. The soil erosion impacts resulting from construction of the Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. The Project would be required to comply with a NPDES General Permit and, as a part of the approval process, the applicant must submit a SWPPP and otherwise comply with all standards and regulations of the State Water Resources Control Board. The mitigation measures **Geo-4a: Site Clearing and Stripping** and **Geo-4b: Slopes and Drainage** recommended in the Previous EIR to address the potential impacts related to soil erosion shaking remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Geo-4a: Site Clearing and Stripping** and **Geo-4b: Slopes and Drainage** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to soil erosion beyond those disclosed in the Previous EIR.

Unstable Geologic Unit

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), the geotechnical investigation of the site determined that the wet, soft, loose, or otherwise disturbed surface soils would not be capable of supporting new construction and would require the placement of compacted, engineered fill material. Post-grading soil conditions would vary considerably across some of the graded building pads, resulting in the possibility of differential movement over the long term. Additionally, many of the lots are underlain by moderately expansive clay soils, which would also result in the possibility of differential movement over the long term. Therefore, construction could expose people or property to unstable soils, adverse engineering properties, or geologic units, which would be a potentially significant impact. All future development on the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study⁹, the Slope Stability Assessment¹⁰, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.

The following measures were recommended in the Previous EIR to reduce the potentially significant impacts associated with expansive soil in the building areas and differential settlement to a level of less than significant:

Geo-5a: Foundation Design, Clay Soils. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. In order to develop foundation design criteria for posttension slab design, Atterberg Limits Tests have been performed on samples of the clay and used the procedures according to the Post-Tensioning Institute design manual entitled "Design and Construction of Post Tensioned Slabs-On-Ground"

⁹ prepared by Earthtec Ltd. in March 2004

¹⁰ prepared by Earthtec Ltd. in April 2004

(1996). Consistent with these reports, foundation designs may include, but shall not be limited to the following:

- All slab foundations be designed by and be post-tensioned as required by the structural designer to act as a unit, to provide structural continuity and to permit strong spanning of local irregularities.
- Assure that at least two feet of granular soil is beneath any reinforced footings and slabs-on-grade.
- Lime treatment of the uppermost two feet of clay soils should also be considered.
- A higher level of mitigation would be to install cast-in-drilled hole piers or deepened footings that penetrate deep into the clay soil in conjunction with free-floating the slab-on-grade.

Geo-5b: Foundation Bearing. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, the foundation system for any individual structure should bear on the same type of earth material-- either on two or more feet of soil or entirely on rock.

Geo-5c: Sub-Grade Preparation. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.

- Once the construction areas have been cleared, and any excavations made, the soils exposed in those areas to receive engineered fill, pavement and slabs-on-grade should be scarified to at least 6 inches.
- The loosened soils should be uniformly moisture conditioned to 1 to 3 percent over optimum and compacted to the requirements for engineered fill. Inability to achieve the stated compaction could be used as a further criteria for the removal of loose and/or wet, soft soils or for the need of special stabilizing measures.

Geo-5d: Material for Fill. All on-site earth materials which are free of significant vegetation (not more than 2 percent) and other undesirable, deleterious substances; which have a plasticity index of 15 or less; which do not contain rocks or lumps greater than 4 inches in greatest dimension with not more than 15 percent larger than 22 inches; and, which are pre-approved by the Project geotechnical engineer are considered suitable for use as fill. Samples from borrow areas should be obtained for laboratory testing (if required) at least four days prior to any material being used/imported to the site.

Geo-5e: Compaction. All building foundation design shall be subject to compliance with the California Building Code. Consistent with this requirement, compaction requirements may include, but shall not be limited to the requirement that loosened native sub-grade soils and engineered fill should be uniformly compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D 1557.

- The uppermost six inches of flatwork and pavement sub-grade soils should be uniformly compacted to 90 percent at 2 to 4 per cent over optimum.
- Fill materials should be spread and compacted in lifts not exceeding 8 inches in uncompacted thickness. The moisture content of fill materials should be determined based upon the compaction characteristics of the earth material. If construction proceeds during or shortly after the wet winter months, it may require time to dry the on-site soils since their moisture content will probably be appreciably above the optimum.
- In addition, if subgrade soils are wet at the time of construction, they could be rutted, loosened or otherwise disturbed to several feet of depth by the construction equipment and require additional over excavation and/or stabilization.
- Construction occurring in later summer or early fall (subsequent to the on-site earth materials becoming relatively dry) may require substantial amounts of water to be added during earthwork operations to enable the appropriate moisture content and compaction to be achieved.

Geo-5f: Sulphate Presence and Corrosion Potential. Upon completion of earthwork construction, testing of the soil for sulphates and evaluation of corrosion potential shall be conducted.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would occur on the same site as analyzed in the Previous EIR. The impacts related to unstable geologic units for the Project would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measures **Geo-5a: Foundation Design, Clay Soils, Geo-5b: Foundation Bearing, Geo-5c: Sub-Grade Preparation, Geo-5d: Material for Fill, Geo-5e: Compaction, and Geo-5f: Sulphate Presence and Corrosion Potential** recommended in the Previous EIR to address the potential impacts related to unstable geologic units remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Geo-5a: Foundation Design, Clay Soils, Geo-5b: Foundation Bearing, Geo-5c: Sub-Grade Preparation, Geo-5d: Material for Fill, Geo-5e: Compaction, and Geo-5f: Sulphate Presence and Corrosion Potential** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to unstable geologic units beyond those disclosed in the Previous EIR.

Bridge Stability

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.4), preliminary bridge design criteria has been developed based on nearby soil boring; the exact locations of the bridge abutments are not currently known. When the final bridge layout is submitted and the exact locations of the abutments known, then further exploration and analysis can be performed, if deemed necessary. Construction of the bridge over Crow Creek could be susceptible to unstable soils, adverse engineering properties, or geologic units, which would be a potentially significant impact.

The following mitigation measures were recommended in the Previous EIR to reduce the bridge instability impacts to a level of less than significant:

Geo-6: Bridge Design. All bridge design and construction shall be subject to compliance with the California Building Code. In addition, the bridge design and construction shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, it is expected that the bridge could be supported upon cast-in-drilled hole piers, commonly referred to as drilled piers, designed in end-bearing. Specific design criteria should include the following:

- Each pier should extend at least 10 feet below the grade existing at the time of our field exploration.
- The piers should bear on very dense earth materials (weathered to intact rock) indicated to be present at various depths in the borings.
- Each pier should be at least 30 inches in shaft diameter. The piers should be at least three pier diameters apart, center-to-center.
- Field and laboratory tests indicate that at the 10 foot depth, the pier may be designed for an allowable axial earth material bearing pressure of 4,800 pounds per square foot for dead plus live load, with a one-third increase for any transient load (including wind or seismic). The weight of the foundation below grade may be neglected in sizing computations for downward loading. The pier foundation should be designed by the structural engineer.
- Ultimate pullout capacity (T_{ult}) in pounds of the pier could be calculated by the following equation: $T_{ult} = 58 DE^2$, where D = pier shaft diameter, in feet; and, E = pier shaft embedment, in feet, into the soils. An appropriate factor of safety should be applied to the resulting uplift resistance. The weight of concrete below grade also may be incorporated into the uplift resistance.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed bridge would occur on the same site as analyzed in the Previous EIR, and the bridge design remains preliminary. Construction of the bridge over Crow Creek could be susceptible to unstable soils, adverse engineering properties, or geologic units. The impacts related to bridge instability for the Project would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measure **Geo-6: Bridge Design** recommended in the Previous EIR to address the potential impacts related to bridge instability remains applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Geo-6: Bridge Design** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to bridge instability beyond those disclosed in the Previous EIR.

Conclusions – Geology and Soils

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant geology and soils impacts that were not identified

in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to geology and soils not previously discussed.

VIII. Hazards and Hazardous Materials

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project located with the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR, including the previously identified existing structures.

Transport, Use, or Disposal or Accidental Release of Hazardous Materials

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.5), the structures to be demolished were constructed prior to 1980. Buildings constructed prior to 1980 often contain asbestos-containing materials and lead-based paint. The demolition of the buildings and transport of asbestos- and lead-containing materials offsite could accidentally release hazardous materials into the environment if the proper precautions are not taken. Demolition of the existing structures could present a health risk associated with possible asbestos-containing materials and lead-based paint existing on and within the buildings. This impact is considered to be potentially significant.

The following mitigation measure was recommended in the Previous EIR to reduce the impact from exposure to asbestos-containing materials or lead-based paint to a level of less than significant:

Haz-1: Demolition Plan. Lead and asbestos surveys should be reviewed/performed and a Demolition Plan for safe demolition of existing structures at the Project site should be prepared. All transportation of hazardous or contaminated materials from the site shall be performed in accordance with an approved Demolition Plan and Removal Action Workplan. The Demolition Plan should address both on-site worker protection and off-site resident protection from both chemical and physical hazards. All contaminated building materials shall be disposed of at appropriate licensed landfill facilities. Prior to whole-scale demolition, hazardous building materials such as peeling, chipping, and friable lead-based paint and asbestos-containing building materials should be removed in accordance with all applicable guidelines, laws, and ordinances. The Demolition Plan should include a program of air monitoring for dust particulates and attached contaminants. Dust control and suspension of work during dry windy days should be addressed in the Demolition Plan.

A licensed asbestos contractor must perform all asbestos related work if there is more than 100 square feet of asbestos involved. If less than 100 square feet is involved, the contractor is not legally required to have the asbestos licensing. However, the contractor must have proper training and utilize the same engineering controls, protective equipment, exposure monitoring, etc. that are required of a licensed asbestos contractor. For this reason, it is recommended that licensed asbestos contractors perform any asbestos related work regardless of the quantity. This is due to the fact that most of the non-asbestos contractors do not have trained asbestos workers or the specialized tools and equipment required to perform asbestos related work.

For the impact of flaking and peeling lead paint the requirements of Title 8, California Code of Regulations, Section 1532.1 (T8 CCR 1532.1) must be followed. These requirements include (but are not limited to) the following:

- Loose and peeling lead-containing paint should be removed prior to building demolition. Workers conducting removal of lead paint must receive training in accordance with T8 CCR 1532.1.
- The lead paint removal project should be designed by a DHS certified lead project designer, project monitor or supervisor.
- Workers conducting removal of lead paint must be certified by DHS in accordance with T8 CCR 1532.1.

- Workers that may be exposed above the Action Level must have blood lead levels tested prior to commencement of lead work and at least quarterly thereafter for the duration of the Project. Workers that are terminated from the Project should have their blood lead levels tested within 24 hours of termination.
- A written exposure assessment must be prepared in accordance with T8 CCR 1532.1.
- Any amount of lead waste generated from painted building components must be characterized for proper disposal in accordance with Title 22, Section 66261.24.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The structures identified in the Previous EIR for demolition have since been demolished and removed from the site. There would be no impact of the Roberts Ranch Project related to exposure to asbestos-containing materials or lead-based paint. The mitigation measure **Haz-1 Demolition Plan** recommended in the Previous EIR to address the potential impacts from exposure to asbestos-containing materials or lead-based paint was implemented for demolition of the structures and is no longer applicable to the Roberts Ranch Project. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to the transport, use, or disposal of hazardous materials beyond those disclosed in the Previous EIR.

Hazardous Emissions

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.5), there are no listed hazardous material sites on or near the site. At the time of the Previous EIR, there were no existing or proposed schools within a quarter mile of the Project area. There would be no impact related to hazardous emissions.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. In the time since the Previous EIR was approved, three schools have been constructed within 0.25 mile of the Project site—Creekside Middle School, Roy A. Johnson High School, and Early Bird Montessori School. Because the Project is a residential development, it would not entail the use of substantial quantities of hazardous materials, and therefore would have no impact. Additionally, there would be no impact related to listed hazardous materials sites on or in the vicinity of the site. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to hazardous emissions. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to hazardous emissions beyond those disclosed in the Previous EIR.

Airport Hazards

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.5), the closest airport to the site is Hayward Executive Air Terminal, approximately 3.5 miles to the southwest. The site is not within an airport land

use plan. No resulting safety hazards would be present for people residing or working in the Project area and there would be no impact.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because the Project area is not within an airport land use plan or within two miles of a public or private use airport, the Project would have no impact related to airport hazards. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to airport safety hazards. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to airport safety hazards beyond those disclosed in the Previous EIR.

Emergency Response

Previous EIR Conclusions

At the time of the Previous EIR, there were no emergency response or evacuation plans in effect in the Project area, as discussed in the Previous EIR (Chapter 4, Section 4.5). There would be no impact on the implementation of any adopted emergency response plan or emergency evacuation plan.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. In the time since the Previous EIR was certified, an emergency response plan for the unincorporated areas of Alameda County—the Operational Area Emergency Response Plan—was prepared.¹¹ The intent of the plan is to strengthen short- and long-term emergency responses and recovery capability, and to identify emergency procedures and emergency management routes in the County. Development of the Project would not impair implementation of or physically interfere with the Operational Area Emergency Response Plan. There are no emergency evacuation plans in effect in the Project area. Therefore, the Project would have no impact on the implementation of any adopted emergency response plan or emergency evacuation plan. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to emergency response. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on emergency response beyond those disclosed in the Previous EIR.

Wildland Fire

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.5), the site was identified as being within a fire hazard severity zone and thus the Previously Approved Project would be designed in accordance with all provisions of the Uniform Fire Code, the California Building Code, and with County of Alameda and State of California standards for fire safety. Additionally, trees located close to the homes would be required to be maintained/pruned to minimize fire risk. Conformance with the current fire and building codes would ensure that the potential impacts on people or structures from wildland fires as a result of the Previously Approved Project would be less than significant.

¹¹ Alameda County. Safety Element of the Alameda County General Plan. February 4, 2014.

Because the site was identified as being within a fire hazard severity zone, mitigation measures (**Serv-1a** and **Serv-1b**, see Public Services – Fire Protection below) were recommended to reduce the potential for impacts related to wildland fire hazards. The Previous EIR clarified that the Previously Approved Project would be required to comply with applicable local and state regulations pertaining to wildland fire safety and defensible space, including the requirements of Appendix II-A of the Fire Code provisions. Allowable fire safety and defensible space planning activities include selective tree pruning, selective removal of dead or dying vegetation that presents a fire hazard, and other selective fuels management activities as determined to be necessary by the Alameda County Fire Department to provide for adequate public safety and fire protection. Potential impacts on people or structures from wildland fires as a result of the Previously Approved Project would be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The fire hazard severity zone maps have been updated since the Previous EIR and the Project is no longer within a fire hazard severity zone. The impacts of the Roberts Ranch Project related to wildland fire would be less than significant. As with the Previous EIR, the Project would be required to comply with applicable local and state regulations pertaining to wildland fire safety and defensible space, including the requirements of Appendix II-A of the Fire Code provisions. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to wildland fire hazards beyond those disclosed in the Previous EIR.

Conclusions – Hazards and Hazardous Materials

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant impacts related to hazards and hazardous materials that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to hazards and hazardous materials not previously discussed.

IX. Hydrology and Water Quality

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course a stream or river in a manner which would result in substantial erosion or siltation on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing hydrology conditions and immediate surroundings of the Project site are generally unchanged since certification of the Previous EIR.

Water Quality

Previous EIR Conclusions

Construction-related Impacts

As discussed in the Previous EIR (Chapter 7, Section 7.4), soil erosion may occur with the construction of houses, roads, and other improvements, which could have an adverse effect on water quality. The Previous EIR found that demolition, grading, and construction activities could generate increases in the amount of sediment dissolved in runoff water and increase the amount of pollution discharged into Crow Creek, which was considered a potentially significant impact. The following mitigation measures were recommended in the Previous EIR to reduce the construction-related water quality impacts:

Hydro-1a: SWPPP Regulatory Compliance. The Project Applicant shall demonstrate compliance with the following regulatory requirements prior to commencement of construction activities:

- The developer shall submit a Notice of Intent to the State Office of Planning and Research and prepare and implement a SWPPP, as required by the NPDES General Permit.
- The SWPPP shall be consistent with the terms of the General Permit, the Manual of Standards for Erosion and Sedimentation Control Measures by the Association of Bay Area Governments, policies and recommendations of the local urban runoff program (County of Alameda) and the Staff Recommendations of the RWQCB.
- The SWPPP shall incorporate BMPs to reduce and treat runoff, and to control sediment and erosion during the construction process.
- A copy of the SWPPP shall be made available at the Project site, but is not required to be submitted to the RWQCB.

Hydro-1b: Stormwater Quality Control Plan BMPs. BMPs shall be utilized during construction to ensure that erosion, runoff, and the alteration of existing drainage patterns from grading activities and Stormwater Quality Control Plan (SWQCP) to the County for review. The SWQCP shall include details on the BMPs to be implemented at the site during grading and construction.

- Stormwater drainage connections and runoff controls shall be designed and constructed prior to beginning demolition and/or grading in order to control any additional stormwater runoff created during these activities. Connections and flow controls shall be established based on estimated natural or current runoff, if needed.
- Non-structural BMPs shall be implemented, including minimizing disturbance of soils to the extent practical, preserving natural vegetation where possible and maintaining the site in clean condition using good housekeeping practices. The project site shall be maintained so that a minimum of sediment-laden runoff leaves the site.
- Structural erosion control BMPs shall be utilized where appropriate, including mulch, grass and stockpile covers. Sediment controls shall be provided at the edge of disturbed areas including such facilities as silt fences, inlet protections, sediment traps and check dams. Silt fences or straw wattles shall be installed prior to any grading at the project site and shall be operable during the rainy season (October 15 to April 15).

- Jute netting, plantings or other erosion control methods shall be placed down-slope of the retaining walls along those portions of the creek banks where retaining wall are proposed.
- Grading at the Project site shall be limited to the excavation shown on the Vesting Tentative Subdivision Map.
- Between October 15 and April 15, all paved areas shall be kept clear of earth materials and debris, and all sediment barriers shall be inspected and repaired at the end of each working day and, in addition, after each storm.
- All graded or disturbed areas at the Project site shall be seeded immediately after grading is complete. Seeded areas which are disturbed by storms shall be repaired, re-seeded and mulched as soon as possible after being damaged.

Hydro-1c: RWQCB Water Quality Certification and Other Permits. The Project applicant shall apply to the RWQCB for Clean Water Act Section 401 Certification and/or water discharge requirement under the Porter Cologne Act. For construction of the Project, the applicant shall submit a Notice of Intent to be covered under the General Permit for Discharges of Stormwater Related to Construction Activities, which is an NPDES permit. Additionally, the Project shall be designed to include post-construction BMPs consistent with the County's NPDES permit for stormwater discharges.

With implementation of these mitigation measures, the Previous EIR found that construction-period water quality impacts would be less than significant.

Operational Impacts

As discussed in the Previous EIR (Chapter 7, Section 7.4), the addition of residential land uses on the undeveloped site would increase the potential for discharge of residential and urban-related pollutants into stormwater runoff. Additionally, the Previous EIR found that construction of homes, roads, and other infrastructure associated with the Previously Approved Project would increase the impervious surface area on the site, allowing stormwater flows across the site and serving as a vehicle for pollution entering the stormwater drainage system. This increase in impervious area and potential for polluted discharge was considered a potentially significant impact. The following mitigation measures were recommended in the Previous EIR to reduce the operational water quality impacts:

Hydro-2a: Post-Construction BMPs. The Project shall implement Tier 2 post-construction BMPs as defined in Table 2 of the Regional Board Staff Recommendations for New and Redevelopment Controls for Stormwater Programs section of Alameda County's Stormwater Management Plan. Under Tier 2 BMPs, drainage from all paved surfaces, including streets, parking lots, driveways and roofs should be routed through an appropriate treatment mechanism before being discharged into the storm drain system. The BMPs are designed to meet the "maximum extent practicable" definition of treatment as specified in the federal Clean Water Act. Specific post-construction BMPs to be implemented at the Project site should include, but not be limited to the following:

- **Minimize Directly Connected Impervious Area at Residential Lots.** All rainfall from residential rooftops and in-lot impervious surfaces should be routed through lawn areas or other pervious surfaces within yards, where infiltration can filter pollutants through the soil before such runoff is "connected" to the storm drain system. Although existing soils on the Project Site have been identified as having moderate to moderately slow infiltration rates, the

upper layers of soils generally consist sandy and silty clays for which infiltration-based stormwater management solutions can be effective.

- **Biofilters.** Biofilters, also known as vegetated swales are vegetated slopes and channels that should be designed into the Project to transport shallow depths of runoff slowly over vegetation. Biofilters can be effective at the site if flows are slow and depths are shallow. This can generally be achieved by grading the site and sloping pavement in a way that promotes sheet flow of runoff. For biofilter systems, features that concentrate flow such as curb and gutter, paved inverts, and long drainage pathways across pavement must be minimized. The slow movement of runoff through the vegetation will provide an opportunity for sediments and particulates to be filtered and degraded through biological activity. A biofilter system may also provide an opportunity for stormwater infiltration which can further remove pollutants and reduces runoff volumes.
- **Retention and detention.** Retention and detention systems should be designed primarily to store runoff for one to two days after a storm prior to discharge into the creek, and will be generally dry until the next storm. A retention system should have a permanent pool that retains the runoff volume until it is replaced during the following storm. A properly designed retention/detention system will release runoff slowly enough to reduce downstream peak flows, allow fine sediments to settle and uptake dissolved nutrients in the runoff where wetland vegetation is included. Retention/detention systems are most appropriate for areas where soils percolate poorly such as the Project site.
- **Manufactured Treatment Systems.** Where there are no opportunities for infiltration systems to provide adequate filtering and treatment of directly connected impervious areas (primarily on-site roadways), manufactured treatment systems should be incorporated into the storm drain system prior to its outfall into Crow Creek. These devices are available from many manufacturers, and generally function to separate urban pollutants from runoff with such mechanisms as catch basins or inlet inserts, separators and/or media filters. These manufactured treatment systems can be inserted into a conventional conveyance storm drain system, and may potentially also supplement more integrative site planning and landscape strategies. They have minimal impact on reducing overall runoff volumes or mitigating peak flows. Other considerations include both initial expense and the cost of intensive, regular maintenance recommended by device manufacturers, which can include trash removal, replacement of filters, flushing cartridges, and vacuuming of sediment.

Hydro-2b: Post-Construction BMP Design Criteria. The Tier 2 post-construction BMPs shall be constructed to incorporate, at a minimum, the following hydraulic sizing design criteria to treat stormwater runoff:

- **Volume Hydraulic Design Basis:** Treatment BMPs whose primary mode of action depends on volume capacity, such as detention/retention units or infiltration structures, shall be designed to treat stormwater runoff equal to:
 - the maximized stormwater quality capture volume for the area, based on historical rainfall records determined using the formula and volume coefficients set forth in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998), pages 175-175 (e.g., approximately the 85th percentile 24-hour storm runoff event); or

- the volume of annual runoff required to achieve 80% or more capture, determined in accordance with the methodology set forth in Appendix D of the California Stormwater BMPs Handbook, (1993), using local rainfall data.
- Flow Hydraulic Design Basis: Treatment BMPs whose primary mode of action depends on flow capacity, such as swales, sand filters or wetlands shall be sized to treat:
 - 10% of the 50-year peak flow rate; or
 - the flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or
 - the flow of runoff resulting from a rain event equal to at least 0.2 inches per hour.

Hydro-2c: Minimized Directly Connected Impervious Area. Pursuant to Final Subdivision Map approval and/or Regional Water Quality Control Board permit approval, the applicant shall further explore opportunities to disconnect rainfall from residential rooftops and in-lot impervious surfaces from the storm drain system, and to increase the permeable surfaces of the developed site. Where feasible, runoff should be routed through lawn areas or other pervious surfaces within yards where infiltration can filter pollutants through the soil before such runoff is “connected” to the storm drain system.

Hydro-2d: Biofilters. Pursuant to Final Subdivision Map approval and/or RWQCB permit approval, the applicant shall further explore opportunities to incorporate vegetative swales, planter boxes, and other types of biofilters into the design of the project (see Appendix Q of the Previous EIR: Post-Construction Stormwater Quality Treatment Options). Additional biofilters may be capable of reducing the minimum treatment volume of runoff that requires additional treatment at the detention basin, thereby potentially reducing the size requirements of the proposed detention facility.

Hydro-2e: Final Design, Water Quality BMPs. Design-level engineering plans shall be submitted to the Alameda County Public Works Clean Water Program pursuant to Final Subdivision Map and improvement plan approval, and similar design-level plans shall be submitted to the RWQCB pursuant to their permit approval process. These engineering plans shall demonstrate how all Alameda County and RWQCB requirements for post-construction BMPs, consistent with the County’s NPDES permit for stormwater discharge, will be met. These plans shall also demonstrate how a comprehensive approach to water quality BMPs is to be implemented for the project.

- If less land is needed for a re-designed detention basin than is shown on the tentative map, the excess land shall remain within that portion of the site indicated as a water quality basin, and shall not be used to create an additional residential lot or to add to an existing residential lot.
- In the event that detailed design-level engineering plans indicate a need for greater land area for the appropriate design of a detention basin, this land area shall not be derived from areas within the identified Riparian Corridor or within the creek bank setback as established pursuant to the Alameda County Watercourse Protection ordinance.
- Any additional land as may be needed for a redesigned detention basin shall be derived from residentially planned land as shown on the Tentative Map. If land from residential lots

is needed to accommodate a redesigned detention basin, this revision would not constitute a substantial change to the Tentative Map.

With implementation of these mitigation measures, the Previous EIR found that post-construction water quality impacts would be less than significant.

Subsequent Permitting Activities

Following certification of the Previous EIR in 2005, the then-project applicants filed for required regulatory agency permits, including Section 401 Water Quality Certification, as summarized below:

Clean Water Act Section 401 Certification, San Francisco Bay Regional Water Quality Control Board

Previous applicants applied for and received RWQCB certifications during the period from 2006 to 2014, but those permits either lapsed or were not implemented. In February 2014, the RWQCB re-issued their latest water quality certification pursuant to an application from the then-applicants for Clean Water Act Section 401 Certification, that the Project will not violate state water quality standards. The February 2014 Certification was premised on a Project description derived from original application materials received from the then-applicant in 2006, a revised application received in April 2011, and supplemental application materials received in May and August 2011, January 2012, and June 2013. These application materials indicated the following details particularly relevant to water quality, as presented in the *Roberts Ranch, Formerly Known as Boundary Creek, Post-Construction Stormwater Treatment Plan* (Zentner and Zentner 2012):

- The developed site will have about 6.4 acres of pervious surfaces and 1.9 acres of impervious areas that will require stormwater treatment BMPs.
- To reduce the volume of stormwater runoff from paved surfaces, pervious concrete will be used for sidewalks, additional parking spaces along the access streets, the emergency vehicle access road to Veronica Avenue, and the driveway to Lot 3.
- The impervious areas will be treated using several bioretention areas (including a 1,638-square foot bioretention basin/rain garden), which together combined for more than 3,080 square feet bio-retention surface area.
- A bioretention treatment area will also be constructed at each residential lot to treat runoff from the rooftops.
- All of the Stormwater Treatment Plan's bioretention areas include BMPs designed in accordance with the design standards in Provision C.3 of the NPDES Municipal Regional Permit for municipal stormwater runoff (Order R2-2009-0074; NPDES Permit No. CAS612008; October 14, 2009, as amended by Order No. R2-2011-0083 on November 28, 2011.).

The 10-year storm event runoff from the Project site was also modeled using the Hydrologic Engineering Center's Hydrologic Modeling System (HEC-HMS); this model incorporates the Soil Conservation Service Curve Number methodology preferred by Alameda County Public Works Agency. The results of this modeling determined that the requirement to reduce post-project stormwater discharge flow rates for the 10-year storm event to a peak of 4.4 cubic feet per second, with the detention pipes 85 percent full, could be attained using 160 linear feet of 72-inch diameter pipe, placed at a 5 percent slope. This system was consistent with the stormwater quality treatment designs for the Project site.

Based on this information, the RWQCB certified that any discharge would comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of state law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification." The RWQCB Certification required compliance with all of the 35 conditions associated with their certification, including but not limited to the following specific to the issue of stormwater treatment:

- The Applicant is responsible for constructing all of the stormwater management BMPs, including bioretention areas and pervious pavement, and ensuring that these BMPs provide Clean Water Act maximum extent practicable treatment for stormwater runoff from about 1.9 acres of impervious surfaces at the Project site, and that this treatment is consistent with the requirements of the NPDES Municipal Regional Permit for municipal stormwater runoff (Order R2-2009-0074; NPDES Permit No. CAS612008; October 14, 2009, as amended by Order No. R2-2011-0083 on November 28, 2011.);
- Detailed stormwater source control measures were, and must remain incorporated in the Declaration of Covenants, Conditions and Restrictions (CC&Rs) of the [Previously Approved Project], and these CC&Rs may not be altered without the approval of the Executive Officer of the Water Board.
- The Homeowners Association for the development shall be responsible for maintaining the post-construction stormwater BMPs so that these BMPs continue to provide the maximum extent practicable treatment of stormwater runoff. Residential lot owners are responsible for maintaining stormwater BMPs on their lots, and these requirements must also be incorporated into the CC&Rs.

Certification conditions also include, but are not limited to the following specific to the issue of construction-period stormwater protection:

- Construction in the creek channel of Crow Creek is restricted to the April 15 to October 15 dry season.
- No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to Crow Creek may occur; construction materials and heavy equipment must be stored outside of the creek channel.
- Prior to the start of the rainy season, the Applicant shall ensure that disturbed areas of the creek banks and disturbed areas that drain to the creeks are protected with correctly installed erosion control measures (jute, straw, coconut fiber erosion control fabric, coir logs, straw, etc.), and revegetated with propagules (seeds, cuttings, divisions) of locally collected native plants;
- Where areas of bare soil are exposed during the rainy season, silt control measures shall be used where silt and/or earthen fill threaten to enter waters of the State. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Build-up of soil behind silt fences shall be removed promptly and any breaches or undermined areas repaired at once.

Roberts Ranch Project Assessment

Construction-related Impacts

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development would include construction of houses, roads, and other improvements, which could have an adverse effect on water quality. The construction-related impacts on water quality for the Roberts Ranch Project would be similar to, but slightly reduced from those discussed in the Previous EIR, but would remain potentially significant.

Mitigation measures **Hydro-1a: SWPPP Regulatory Compliance, Hydro-1b: Storm Water Quality Control Plan BMPs, and Hydro-1c: RWQCB Water Quality Certification and Other Permits** as required of the Previously Approved Project remain as applicable requirements of the Roberts Ranch Project. These measures would help reduce construction-period stormwater discharges and help reduce the likelihood of increase in erosion. Consistent with the conclusions of the Previous EIR, implementation of these mitigation measures would reduce construction-period water quality impacts to a less than significant level.

There are no changes in the Project or in circumstance, nor is there any new information that would result in a new, or substantial increase in the severity of previously identified construction-related water quality impacts beyond those disclosed in the Previous EIR.

Operational Impacts

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would add residential land uses on the undeveloped site and increase the impervious surface area of the site, thereby increasing the potential for the discharge of residential and urban-related pollutants in stormwater runoff and the stormwater drainage system. As noted above under Subsequent Permitting Activities, the RWQCB Certification required compliance with all of the 35 conditions associated with their certification. The Project design has incorporated these conditions and demonstrated compliance. Mitigation measures from the Previous EIR still apply to the Roberts Ranch Project, however, as indicated below:

- **Hydro-2a: Post-Construction BMPs and Hydro-2d: Biofilters** remain applicable to the Project, but these BMPs and biofilters have been reviewed and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on the *Roberts Ranch, Formerly Known as Boundary Creek, Post-Construction Stormwater Treatment Plan*.
- **Hydro-2b: Post-Construction BMP Design Criteria** remains applicable to the Project, but has been completed, reviewed and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on the modeled 10-year storm event runoff from the Project site as modeled using the Hydrologic Engineering Center's Hydrologic Modeling System (HEC-HMS).
- **Hydro-2c: Minimized Directly Connected Impervious Area** remains applicable to the Project, but has been completed, reviewed, and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on a design plan that included pervious concrete used for sidewalks, additional parking spaces along the access streets, the emergency vehicle access road to Veronica Avenue, and the driveway to Lot 3, as well as bioretention treatment area being constructed at each residential lot to treat runoff from the rooftops.
- **Hydro-2e: Final Design, Water Quality BMPs** remains applicable to the Project. Design-level engineering plans for the Roberts Ranch Project shall be submitted to the Alameda County

Public Works Clean Water Program pursuant to Final Subdivision Map and improvement plan approval, and similar design-level plans shall be re-submitted to the RWQCB (as may be required) pursuant to their permit approval process.

There are no changes in the Project that would result in a new or substantial increase in the severity of previously identified impacts on stormwater quality beyond those disclosed in the Previous EIR. Whereas new information relative to the RWQCB Certification is now known regarding the conditions of approval for 401 Water Quality Certification, this new information does not result in a new or substantial increase in the severity of previously identified post-construction stormwater quality beyond those disclosed in the Previous EIR. Overall, there would be no new impacts on operational water quality beyond those identified in the Previous EIR.

Creek Bank Alteration

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 7, Section 7.4), other than construction of the bridge and the storm drain outfall, the Previously Approved Project did not include any work within Crow Creek or its associated Riparian Corridor. Nor did it include any development within the setback as imposed by the Alameda County Watercourse Protection Ordinance (Sections 13.12.010 et seq of the County Ordinances). The Watercourse Protection Ordinance setback is calculated by defining a 2:1 (horizontal: vertical) slope from the creek bottom to the top of the adjacent slope, and then adding a 20 foot setback from that intersection point. As indicated in the Previous EIR, the director of the Public Works Agency is responsible for issuing permits for work within the Watercourse Protection Ordinance setback (e.g., the bridge and storm drain outfall). The County ordinance provides several options where development may occur within the setback with permit approval. Section 13.12.120 states, "if, in the opinion of the Director of Public Works, the requirements of the ordinance will be substantially met by conditions prescribed by a permit granted by another agency, the Director may waive the permit requirements of this chapter." As this Previously Approved Project was assumed to require permit approvals from the Corps, RWQCB, and CDFW, these approvals may be deemed sufficient for local permit purposes. In this instance, construction of the bridge and storm drain outfall would not be inconsistent with the Ordinance, and no significant impacts related to creek bank alterations would occur. The bridge would result in the temporary disturbance of vegetation and the removal of several trees, and the storm drain outfall would require a small area of fill and erosion control, but these impacts were not considered a significant alteration of the creek bank.

Subsequent Permitting Activities

As discussed under the Biology section of this CEQA Addendum document, the prior applicant filed for several required regulatory agency permits, including a Notification to the CDFW of a Lake or Streambed Alteration Agreement for the bridge and storm drain outfall. CDFW did not provide the applicants with a draft Agreement, or inform them that an Agreement was not required. As a result, the applicants were permitted by law to complete the bridge and storm drain outfall as described in their notification without an Agreement, but subject to the details as described in the Notification. Those details included:

1. During construction of the storm drain outfall, disturbance or removal of water/ substrate from the channel will not exceed the minimum necessary to complete operations.
2. Work will be completed during the recommended "work window" of June 15 through October 15 to avoid the steelhead/rainbow trout migration and spawning season.

3. Excavation for and placement of fill will occur during low flow or dry weather conditions with a 72-hour prediction of no precipitation.
4. A focused survey for active nests of migratory birds will be conducted for any construction during the nesting season (February 1 to July 30) and pre-construction surveys will be conducted for California Red-legged frogs.
5. Orange construction fencing will be used to delineate the construction site and existing vegetation will be retained to the extent practicable.
6. Sediment control BMPs will include silt fencing, staked straw wattles, and defined entry and exit access points. BMPs will be inspected weekly.
7. A SWPPP and BMPs have been developed and approved by the RWQCB. A post-construction stormwater plan has also been developed for the project site.
8. The mitigation program will include habitat enhancement and restoration of riparian and oak woodlands and preservation of the creek and associated woodlands within a 4.1-acre Riparian Corridor. The mitigation program includes restoration of 0.31 acre of riparian woodland, all of which is within or directly adjacent to the creek floodplain and banks, the restoration of 0.54 acre of oak woodland and the enhancement of 1.21 acres of oak woodland. The riparian Corridor will provide a habitat buffer averaging more than 50 feet (20 to 150 feet) beyond the banks of the creek. Mitigation work will include management of the restored habitat for 10 years after construction.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. All grading and construction activities would occur outside the defined Riparian Corridor. Additionally, all grading and construction activities would occur outside the development setbacks from the creek and related systems pursuant to the County Watercourse Protection Ordinance (see prior Figure 5).¹² Similar to the Previously Approved Project, the Roberts Ranch Project has the same two elements that would be within the creek setback—the storm water outfall and abutments for the proposed bridge. The impacts on Crow Creek related to these two improvements would be the same as those discussed in the Previous EIR, and would not be a significant alteration to the creek bank.

These two elements of the Project will still be subject to the requirements of the County Watercourse Protection Ordinance, but may be eligible for a waiver of the permit requirements if the Director of Public Works determines that the requirements of the ordinance will be substantially met by conditions prescribed by another agency (e.g., the CDFW Lake or Streambed Alteration Agreement, the Corps NWP, or the RWQCB Section 401 Certification).

There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to creek bank alteration beyond those disclosed in the Previous EIR, and there would be no new impacts over those identified in the Previous EIR.

¹² The ordinance applies to developments which require a permit issued by the director of public works. Although the residential portion of the Project would be developed outside the creek setback, the storm water outfall and abutments for the bridge providing access to the development would be constructed within the creek setback. Development of the bridge requires a permit and thus is subject to the Watercourse Protection Ordinance.

Runoff and Storm Drain Capacity

Previous EIR Conclusions

As discussed in the Previous EIR, development of the Previously Approved Project would increase the amount of impervious surface area, which would intensify peak flow rates during rain events, and discharge a greater volume of water at a faster rate into the storm drainage system and ultimately into Crow Creek. Larger peak stormwater discharges would increase the potential for erosion and sedimentation within Crow Creek. The increased stormwater flows could exceed downstream drainage system capacity and contribute to downstream flooding conditions, which would be a potentially significant impact. The following mitigation measure was recommended in the Previous EIR to reduce impacts related to runoff and storm drain capacity to a level of less than significant:

Hydro-3: Detention of Increased Stormwater Flows. The Project's storm drain system shall be designed to provide for over-sized underground conduits (pipes) and detention basin that provide for the detention of increased storm water flows attributable to the Project. The amount of required detention storage shall be equal to the difference in volume of the increased runoff attributed to the Project's computed runoff coefficient, less the volume of increased runoff already anticipated by the District at a runoff coefficient of 0.45.

- The required storage shall be computed using flood routing techniques with a unit hydrograph. The SCS method (e.g., TR-55) may be used to develop storm hydrographs and routing calculations when designing the storage and outlet drainage works.
- Discharge from the conduit into Crow Creek shall be controlled by the outlet works to Crow Creek such that the predetermined discharge rate from the detention facility and the peak flow in Crow Creek are not exceeded.
- The storage facility shall be designed such that the water surface returns to its base elevation within 24 hours.
- Care should be taken to prevent siltation problems.
- Assurances shall be provided for the continued maintenance of the storage and outfall facilities through a homeowners association established for the Project.

Subsequent Permitting Activities

As discussed above, the prior project applicants filed for several required regulatory agency permits, including Section 401 Water Quality Certification from the RWQCB. The Water Board's February 2014 Certification included a review and consideration of hydraulic modeling of the 10-year storm event runoff from the Project site, using the HEC-HMS, which incorporates the methodology preferred by the Alameda County Public Works Agency (pursuant to mitigation measure **Hydro-3: Detention of Increased Stormwater Flows**). The results of this modeling determined a requirement to reduce post-project stormwater discharge flow rates for the 10-year storm event to a peak of 4.4 cubic feet per second, and that this flow rate could be achieved using detention pipes 85 percent full, and using 160 linear feet of 72-inch diameter pipe placed at a 5 percent slope. This system was also found to be consistent with the stormwater quality treatment designs for the site.

Based on this information, the RWQCB certified that any discharge would comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307

(Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification." The RWQCB Certification required compliance with all of the 35 conditions associated with their certification.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Although the increase in impervious area would be slightly less and the runoff and required storm drain capacity for the Roberts Ranch Project would be slightly reduced, impacts related to runoff and storm drain capacity would be similar to those discussed in the Previous EIR, and would remain potentially significant.

Mitigation measure **Hydro-3: Detention of Increased Stormwater Flows** remains applicable to the Project, but has been completed, reviewed, and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on the modeled 10-year storm event runoff from the Project site as modeled using the HEC-HMS. The RWQCB has indicated that the current applicant, as a new party to the prior Certification, must apply to the RWQCB to revise the certification identifying the new party as the Applicant, and that any proposed material change shall be reported to the RWQCB in advance of implementation of any change, including but not be limited to all significant new soil disturbances, all proposed expansions of development, or any change in drainage characteristics at the Project site.

There are no changes in the Roberts Ranch Project that would result in a new or substantial increase in the severity of previously identified impacts related to runoff and storm drain capacity beyond those disclosed in the Previous EIR. Whereas new information relative to the RWQCB Certification is now known regarding the basis for hydrologic modeling and conditions of approval for 401 Water Quality Certification, this new information does not result in a new or substantial increase in the severity of previously identified impacts related to runoff and storm drain capacity beyond those disclosed in the Previous EIR. Overall, there would be no new impacts related to runoff and storm drain capacity beyond those identified in the Previous EIR.

Groundwater

Previous EIR Conclusions

As discussed in the Previous EIR, despite the potential increase in the amount of impervious surface area, surface runoff from the site would continue to drain into Crow Creek, which would recharge the groundwater at a similar rate as it does currently. Development of the Previously Approved Project would have no impact on the depletion of groundwater supplies.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would increase the impervious area, but surface runoff from the site would drain into and be recharged by Crow Creek; therefore, no impact is expected. Consistent with the conclusions of the Previous EIR, the Roberts Ranch Project would not result in a significant new impact on groundwater. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on groundwater beyond those disclosed in the Previous EIR.

Flooding, Seiche, Tsunami, Mudflow

Previous EIR Conclusions

As discussed in the Previous EIR, the site is not in an area prone to seiche, tsunami, or mudflow. Crow Creek is a potential source for flooding, but the 500-year flood for Crow Creek is entirely contained within its natural channel according to Federal Emergency Management Agency maps. The Previous EIR found the Previously Approved Project would have no impact related to the exposure of people or structures to a significant risk of loss, injury or death involving flooding, seiche, tsunami, or mudflow.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR; therefore, no impact is expected. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to flooding, seiche, tsunami, or mudflow. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to flooding, seiche, tsunami, or mudflow beyond those disclosed in the Previous EIR.

Conclusions – Hydrology and Water Quality

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Roberts Ranch Project would not substantially increase the severity of significant hydrology or water quality impacts identified in the Previous EIR, nor would it result in new significant impacts related to hydrology and water quality that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to hydrology and water quality not previously discussed.

Although the previous project applicant obtained and renewed permits for the project as approved in 2005, the new applicant would be responsible for obtaining revised permits (as may be required) for the proposed Project (e.g., Streambed Alteration from CDFW, water quality certification from the RWQCB, and NWPs from the Corps), and the Project would need to comply with any updated requirements, terms, and conditions in these revised permits.

X. Land Use and Planning

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project: a) Physically divide an established community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Divide an Established Community

Previous EIR Conclusions

The division of an established community was not analyzed in the Previous EIR as it was not a CEQA threshold at that time.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would occur on a mostly vacant site surrounded by residential uses to the north, east, and west. The Project would not change the neighboring residential uses and existing access points would be maintained. Therefore, the Project would not physically divide an established community and there would be no impact.

Conflict with Land Use Plan

Previous EIR Conclusions

Conflicts with Goals and Policies of the Castro Valley Plan

As discussed in the Previous EIR (Chapter 4, Section 4.6), to ensure full compliance with the policies and principles of the Castro Valley Plan, the design for the Previously Approved Project would include the use of split-pad building foundations and/or post-and-beam foundations, allowing the use of the natural topography on the site and maintain its southward slope. The Previously Approved Project's

implementation of these land use and planning concepts would reduce the potential for conflict with the Castro Valley Plan and impacts would be less than significant.

Conflicts with Goals and Policies Adopted to Avoid or Mitigate Environmental Effects

As discussed in the Previous EIR (Chapter 4, Section 4.6), portions of the Previously Approved Project (bridge across Crow Creek and the stormwater outfall) would have been developed within an area prescribed as a creek setback pursuant to the standards of the County's Watercourse Protection Ordinance. No residential development would encroach into the Watercourse Ordinance's setback area, which would reduce or avoid many of the potentially significant impacts (i.e., flooding, erosion and sedimentation, riparian habitat) associated with a conflict with the Watercourse Protection Ordinance. Resultant impacts would be less than significant.

Roberts Ranch Project Assessment

Conflicts with Goals and Policies of the Castro Valley Plan

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The impacts related to conflicts with the Castro Valley Plan for the Roberts Ranch Project would be similar to those discussed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to conflicts with the Castro Valley Plan beyond those disclosed in the Previous EIR.

Conflicts with Goals and Policies Adopted to Avoid or Mitigate Environmental Effects

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would not encroach into the Watercourse Protection Ordinance's setback area (see **Figure 5**). As shown in the figure, only the proposed bridge across Crow Creek and the stormwater outfall would not conform to the Watercourse Protection Ordinance creek setback. The impacts from this inconsistency would be similar to those discussed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to any inconsistency with the County's Watercourse Protection Ordinance beyond those disclosed in the Previous EIR.

Conflict with Habitat Conservation Plan or Natural Community Conservation Plan

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.6), the site is not subject to any habitat conservation or natural community conservation plans; there would be no impact. Additionally, the Previous EIR discusses the Alameda County Specific Plan for Areas of Environmental Significance (May 1977) as it pertains to the designation and management of riparian areas. The Riparian Corridor demarcated on the site is consistent with the definition of Riparian Areas as provided in the Specific Plan. The Previously Approved Project (with mitigation measures as recommended in the Previous EIR) was determined to be consistent with the definitions, objectives, and policies of the Alameda County Specific Plan for Areas of Environmental Significance.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR and would not be subject to any habitat conservation or natural community conservation plans. The conclusion of no impact would be the same for the Project. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to habitat conservation or natural community conservation plans, nor would it result in a significant new impact related to the Alameda County Specific Plan for Areas of Environmental Significance. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to habitat conservation or natural community conservation plans beyond those disclosed in the Previous EIR.

Conclusions – Land Use and Planning

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant land use and planning impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to land use and planning not previously discussed.

XI. Mineral Resources

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project: a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and uses of the and near the Project site remain generally unchanged from the Previous EIR.

Loss of Mineral Resources

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.7), there are no known mineral resources or mineral resource recovery activities on or near the site. Development of the Previously Approved Project would not result in the loss of known mineral resources or the availability of a locally important mineral resource recovery site. There would be no impact.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the proposed residences would occur on the same site as analyzed in the Previous EIR. The Project site does not contain mineral resources or uses. Development of the Project would not result in the loss of known mineral resources or the availability of a locally important mineral resource recovery site. There would be no impact.

Conclusions – Mineral Resources

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant mineral resources impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to mineral resources not previously discussed.

XII. Noise

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Exposure of Persons to or Generation of Excessive Noise

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.8), noise measurement data indicate that Community Noise Equivalent Level (CNEL) noise levels on the site are approximately 65 to 66 A-weighted decibels (dBA), with the higher level being closest to I-580. Noise levels between 55 and 70 dBA are considered “Conditionally Acceptable” for residential uses. According to the State Noise Compatibility Guidelines standards, “Conditionally Acceptable” areas where new construction or development is proposed should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are incorporated into the design. Conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice in achieving interior noise levels of 45 dBA in areas with noise levels up to 70 dBA. The

use of these routine construction techniques in developing the Previously Approved Project would reduce the exposure of people to excessive noise; therefore, noise impacts would be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The construction of the proposed residences would place residents in an area with CNEL noise levels of approximately 65 to 66 dBA. As with the Previously Approved Project, the Roberts Ranch Project would use conventional construction and design techniques such as including closed windows and fresh air supply systems or air conditioning to achieve interior noise levels of 45 dBA. Development of the Project would not expose people to or generate excessive noise levels. Impacts would be similar to those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to excessive noise. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts from excessive noise beyond those disclosed in the Previous EIR.

Construction Noise

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.8), noise from demolition, grading, and other construction activities, as well as construction traffic along Veronica Avenue and Crow Canyon Place, would exceed County noise exposure standards for adjacent residences. Noise from typical construction activities ranges from 75 to 85 dB at 50 feet, and there are several residences within 50 feet of the site. The Alameda County Noise Ordinance Section 6.60.070(E) exempts construction activities from the provisions of the ordinance, provided the activities do not occur earlier than 7 a.m. or later than 7 p.m. on weekdays and earlier than 8 a.m. or later than 5 p.m. on weekends. The exemption to the noise ordinance does not mitigate the environmental impact of construction noise on nearby sensitive receptors. This impact is considered to be potentially significant.

The following mitigation measures were recommended in the Previous EIR to reduce the impact from construction noise to a level of less than significant:

Noise-1a: Construction Equipment Mufflers. Mufflers shall be used on all heavy equipment during construction activities.

Noise-1b: Construction Hours and Complaint Resolution. The Project should limit the operation of excessively noisy tools or equipment to the period between 7 a.m. and 7 p.m. on weekdays (except legal holidays) and between 8 a.m. and 5 p.m. on weekends. Additionally, adequate muffling and proper maintenance of all construction equipment at the Project site shall be required. Signs shall be posted to notify the adjacent residents of the period of construction with a name and phone number to call for noise complaints. The Applicant and the County shall agree on and perform an appropriate response and enforcement mechanism for all noise complaints.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family

residences, which would be fewer residences than analyzed in the Previous EIR and result in a slightly shorter construction phase. The construction noise from development of the Project, however, would still exceed County noise exposure standards for adjacent residences. Impacts would be similar to those discussed in the Previous EIR, but would remain potentially significant. The mitigation measures **Noise-1a: Construction Equipment Mufflers** and **Noise-1b: Construction Hours and Complaint Resolution** recommended in the Previous EIR to address the potential impacts from construction noise remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Noise-1a: Construction Equipment Mufflers** and **Noise-1b: Construction Hours and Complaint Resolution** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts from construction noise beyond those disclosed in the Previous EIR.

Operational Noise

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.8), development of the Previously Approved Project would increase the ambient noise levels associated with the site because the property itself is undeveloped. The increase in noise levels from the construction of the new residences would be typical of noise associated with residential areas and would be similar to the noise levels in existing residential areas in Castro Valley. The addition of new residences under the Previously Approved Project would generate traffic, but noise from these vehicles would not be noticeable. The operational noise impacts would therefore be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR. The operational noise impacts of the Project would be similar to and slightly reduced from those discussed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified operational noise impacts beyond those disclosed in the Previous EIR.

Airport-related Noise

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.8), the Project site is not close enough to the nearest airport (approximately 3.5 miles to the southwest) to be affected by aircraft noise. There would be no impact related to noise from nearby airports.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The Project site would remain the same and would not be affected by aircraft noise. There would be no impact related to noise from nearby airports. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to aircraft noise. There are no changes in the Project or in circumstance, nor is there any new information that would

result in a substantial increase in the severity of previously identified impacts from aircraft noise beyond those disclosed in the Previous EIR.

Conclusions – Noise

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant noise impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to noise not previously discussed.

XIII. Population and Housing

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project: a) Induce substantial population growth in an area either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Population Growth

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.9), the construction of 28 new residences would result in a slight increase in population (approximately 78 additional residents).¹³ The addition of these new residents in an area designated by the Castro Valley Plan for population growth does not qualify as a substantial increase in population. The impact would therefore be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer additional residents (approximately 58). The impacts on population growth from the Project would be similar to and slightly reduced from those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to population growth. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified population growth impacts beyond those disclosed in the Previous EIR.

¹³ Based on an average of 2.78 persons per household in Alameda County.

Displacement of Housing or People

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.9), the development of the subdivision would eliminate two housing units, but additional housing units would be constructed on the site. Despite the loss of the two housing units, the addition of new housing units would adequately make up for the loss and would not result in the displacement of substantial numbers of existing housing or of people. The impact would therefore be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 new housing units, which would be fewer new housing units than analyzed in the Previous EIR. The Project would not result in the displacement of substantial numbers of existing housing or of people. Impacts would be similar to those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to displacement of housing or people. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts beyond those disclosed in the Previous EIR.

Conclusions – Population and Housing

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant population and housing impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to population and housing not previously discussed.

XIV. Public Services

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:			
i) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Fire Protection

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.10), construction of 28 new residences on the site would result in a slight increase in population (approximately 78 additional residents). These new residents would require fire protection from the Alameda County Fire Department, which provides all risk services (e.g., fire suppression, hazardous materials mitigation, paramedic services) to unincorporated areas of the County, including the Project area. The small increase in residents on a predominantly urban infill site would not affect fire department service ratios or response times, nor would any new fire protection facilities need to be provided. This impact would therefore be less than significant.

The Previous EIR noted that the site is within a fire hazard severity zone and the impact is considered to be potentially significant. Pursuant to standard County practices, the Alameda County Fire Department will perform detailed review and approval of subsequent project entitlements and permits including final maps, grading permits, building permits and final inspections prior to occupancy. Additionally, the Alameda County Fire Department recommended the following mitigation measures to address emergency access and fire protection issues and reduce potential impacts to a level of less than significant:

Serv-1a: Fire Access. The following design and operational considerations shall be incorporated into the project to provide suitable emergency access for fire apparatus:

- The emergency vehicle access road shall be increased to a 20-foot width. The gate, lock, and other obstructions for the emergency vehicle access road shall be approved by the Alameda County Fire Department. Grade transitions at the emergency vehicle access road shall demonstrate adequate approach and departure angles.
- The inside radius of the curve on Crow Canyon Place at the bridge shall be increased to 50 feet.
- Areas where parking is not permitted, including turnarounds and turnouts, shall be posted as fire lanes. Parking shall not be permitted on fire lanes, and should not occur on Crow Canyon Place or on Roberts Court.
- The proposed bridge shall be designed to an HS-20 loading standard to accommodate fire equipment.

Serv-1b: Fire Protection. The following design and operational considerations shall be incorporated into the project to provide adequate fire protection:

- Fire hydrants and flow requirements shall be based on the codes and standards in effect at the time of building permit issuance, and based on the size of the building and type of construction.
- Roofs within the Project shall comply at a minimum with Class B Fire rating, in accordance with the Alameda County Building Code.
- The project shall comply with applicable local and state regulations pertaining to wildland fire safety and defensible space, including the requirements of Appendix II-A of the Fire Code provisions. Allowable fire safety and defensible space planning activities include selective tree pruning, selective removal of dead or dying vegetation that presents a fire hazard, and other selective fuels management activities as determined to be necessary by the Alameda County Fire Department to provide for adequate public safety and fire protection.
- During demolition and construction, all requirements of Article 87 of the Fire Code regarding fire-safe construction practices shall be implemented by the contractor or project manager.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer additional residents (approximately 58). The impacts on fire protection resulting from development of the Project would be similar to and slightly reduced from those discussed in the Previous EIR. The mitigation measures **Serv-1a: Fire Access** and **Serv-1b: Fire Protection** recommended in the Previous EIR to address the potential impacts from emergency access and fire protection issues remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Serv-1a: Fire Access** and **Serv-1b: Fire Protection** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on fire protection beyond those disclosed in the Previous EIR.

Police Protection

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.10), construction of 28 new residences on the site would result in a slight increase in population (approximately 78 additional residents). These new residents would require police protection from the Alameda County Sheriff's Office, which is responsible for police services on all unincorporated lands within the County, including the Project area. The small increase in residents on a predominantly urban infill site would not affect police department service ratios or response times, nor would any new police facilities need to be provided. The impact would therefore be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer additional residents (approximately 58). The impacts on police protection resulting from development of the Project would be similar to and slightly reduced from those discussed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on police protection beyond those disclosed in the Previous EIR.

Schools

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.10), Castro Valley Unified School District would provide primary and secondary education services for students from the site. Development of the Previously Approved Project would generate approximately 20 additional students within the school district.¹⁴ The corresponding increase in school enrollment as a result of these additional students would not directly result in substantially accelerated deterioration of school facilities, nor would it require the expansion or construction of new school facilities elsewhere. The increase in students, however, could potentially contribute to the cumulative demand for more school facilities. This impact is considered to be potentially significant.

The following mitigation measure was recommended in the Previous EIR to reduce the cumulative impact on school services to a level of less than significant:

Serv-2: Facilities Impact Mitigation Fee. The Applicant shall pay the required school facilities impact mitigation fee in order to ensure that the Project bears the individual incremental share of improvements to accommodate the cumulative demand for school facilities resulting from the increase in student population.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer

¹⁴ Using a statewide average student yield factor of 0.7 student per household.

additional students (approximately 15). The impacts on school services resulting from development of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Serv-2: Facilities Impact Mitigation Fee** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on school services beyond those disclosed in the Previous EIR.

Parks

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.10), construction of new residences on the site would result in a slight increase in population. These new residents would likely use the local parks and recreation facilities, including Earl Warren Park, Bay Trees Park, Cull Canyon Regional Recreation Area, and Don Castro Regional Recreation Area—all of which are within a one-half-mile radius of the site. The small increase in residents would not directly result in substantially accelerated deterioration of parks and park facilities, nor would it require the expansion or construction of new park facilities elsewhere. The increase in residents, however, could potentially contribute to the cumulative demand for more parks and park facilities. This impact is considered to be potentially significant.

The mitigation measure **Rec-1: Recreation Dedication In-Lieu Fee** (see Recreation below) was recommended in the Previous EIR to reduce the cumulative impacts on parks and park facilities to a level of less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer additional residents. These new residents would likely use the local parks and recreation facilities within a one-half-mile radius of the site. The impacts on parks and park facilities resulting from development of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Rec-1: Recreation Dedication In-Lieu Fee** (see Recreation below) would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on parks and park facilities beyond those disclosed in the Previous EIR.

Conclusions – Public Services

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant public services impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to public services not previously discussed.

XV. Recreation

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Recreational Facilities

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.10), construction of 28 new residences on the site would result in a slight increase in population (approximately 78 additional residents). These new residents that would likely use the local parks and recreation facilities, including Earl Warren Park, Bay Trees Park, Cull Canyon Regional Recreation Area, and Don Castro Regional Recreation Area—all of which are within a one-half-mile radius of the site. The small increase in residents would not directly result in substantially accelerated deterioration of park and recreation facilities, nor would it require the expansion or construction of new park and recreation facilities elsewhere. The increase in residents, however, could potentially contribute to the cumulative demand for more park and recreation facilities. This impact is considered to be potentially significant.

The following mitigation measure was recommended in the Previous EIR to reduce the cumulative impacts on park and recreation facilities to a level of less than significant:

Rec-1: Recreation Dedication In-Lieu Fee. The Applicant shall pay the required park dedication in-lieu fee in order to ensure that the Project bears the individual incremental share of improvements to accommodate the cumulative demand for park and recreation facilities resulting from the increase in population.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Project development would result in the construction of 21 single-family residences, which would be fewer residences than analyzed in the Previous EIR and result in fewer additional residents (approximately 58). These new residents would likely use the local park and recreation facilities within a one-half-mile radius of the site. The impacts on park and recreation facilities resulting from development of the Project would be similar to and slightly reduced from those discussed in the Previous EIR, but would remain potentially significant. Consistent with the conclusions of the

Previous EIR, implementation of mitigation measure **Rec-1: Recreation Dedication In-Lieu Fee** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on park and recreation facilities beyond those disclosed in the Previous EIR.

Conclusions – Recreation

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant recreation impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to recreation not previously discussed.

XVI. Transportation/Traffic

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ration on roads, or congestion at intersections).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the Alameda County Congestion Management Agency.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) A conflict with adopted policies, plans or programs supporting alternative transportation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR. The traffic study conducted for the Original Project was not updated for the Previous EIR, nor has it been updated for this Addendum.

Trip Generation and Increased Traffic

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), implementation of the Previously Approved Project would increase traffic volumes on Crow Canyon Place. The Previous EIR used the ITE Trip Generation Manual rate of 10 vehicle trips per unit per day, with 1 trip per unit during each peak hour. The Previous EIR estimated that the number of vehicle trips generated would be approximately 283

daily trips. Although the daily traffic volumes on Crow Canyon Place¹⁵ would be increased by 283 trips under the Previously Approved Project, this amount of additional traffic was not considered to be significant because a two-lane residential type street can carry up to 2,000 vehicle trips per day without any adverse capacity, flow, or safety impacts. Additionally, the traffic report found that the capacity of the Crow Canyon Place/Crow Canyon Road intersection would not be significantly affected by the additional vehicle trips of the Project. The impact was therefore found to be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The Project proposes to develop 21 single-family residences, which—using the ITE Trip Generation Manual rate of 10 vehicle trips per unit per day, with 1 trip per unit during each peak hour—would result in approximately 212 additional vehicle trips over the average daily traffic on Crow Canyon Place. The increased traffic volume impacts resulting from development of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact from increased traffic volume. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts from increased traffic volume beyond those disclosed in the Previous EIR.

Alameda County Congestion Management Authority Level of Service Standards

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), project-generated peak-hour vehicle trips would cumulatively contribute to the violation of an Alameda County Congestion Management Authority (ACCMA) Level of Service (LOS) standard. Project-generated peak-hour vehicle trips would add to LOS "E" and "F" conditions at the intersection of Crow Canyon/Grove Way and East Castro Valley Boulevard, but the amount of change attributable to the small number of project-generated peak hour vehicle trips would be negligible. Because the Previously Approved Project was to be assessed a traffic impact fee (based on the number of residential units constructed) for both local roadway improvements and for regional improvements on Crow Canyon Road and other roadways in this portion of Alameda County, the Previous EIR concluded that the cumulative impact related to the violation of an ACCMA LOS standard would be less than significant.

The following standard County condition of approval was recommended in the Previous EIR to reduce the impact related to a violation of an ACCMA LOS standard to a level of less than significant:

Traf-1: Traffic Fee. The Previously Approved Project shall be assessed the County's traffic impact fee, based on the number of residential units constructed.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. The Roberts Ranch Project proposes to develop 21 single-family residences, which would result in Project-generated peak-hour vehicle trips and add to LOS "E" and "F" conditions at the

¹⁵ The average daily traffic on Crow Canyon Place is estimated in the Previous EIR to be about 300 vehicle trips per day.

intersection of Crow Canyon/Grove Way and East Castro Valley Boulevard. The impacts of the Project related to a violation of an ACCMA LOS standard would be similar to and slightly reduced from those discussed in the Previous EIR and would remain potentially cumulatively considerable. The mitigation measure **Traf-1: Traffic Fee** recommended in the Previous EIR to address the potential impacts from project-generated peak-hour vehicle trips remains applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measure **Traf-1: Traffic Fee** would reduce impacts to a less than significant level. There are no changes in the Project, changes in circumstance, or new information that would result in a substantial increase in the severity of previously identified impacts from increased peak-hour vehicle trips beyond those disclosed in the Previous EIR.

Air Traffic Patterns

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), the Project site is not near an airport or in an established flight path that would be affected by development of the Previously Approved Project. There would be no impact with regard to change in air traffic patterns.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because the Project site is not near an airport or in an established flight path that would be affected by development of the Project, there would be no impact with regard to change in air traffic patterns. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on air traffic patterns. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on air traffic patterns beyond those disclosed in the Previous EIR.

Design Hazards

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), an internal network of private roads with widths of 38 and 30 feet would be provided to accommodate the residential use of the site. Although the widths of these private roads would be less than the County minimum right-of-way width of 50 feet, from a traffic circulation and safety standpoint, the roadway widths, curvature, and grades under the Previously Approved Project are appropriate. Pursuant to mitigation measure **Serv-1a** (see Public Services – Fire Protection), parking shall not be permitted on fire lanes, on Crow Canyon Place, or on Robert's Court so as to ensure adequate fire access and to ensure that the road design does not create a safety hazard. Impacts related to hazardous design features or incompatible uses would be less than significant.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. One private internal roadway is proposed with a width of 36 feet. Although the width of this private road would be less than the County minimum right-of-way width of 50 feet, from a traffic circulation and safety standpoint, the roadway width, curvature, and grade proposed is considered appropriate. Pursuant to mitigation measure **Serv-1a** (see Public Services – Fire Protection), parking shall not be permitted on fire lanes, on Crow Canyon Place, or on Robert's Court so as to ensure

adequate fire access and to ensure that the road design does not create a safety hazard. Impacts related to hazardous design features or incompatible uses would be similar to those discussed in the Previous EIR. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new design hazard impacts. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified design hazard impacts beyond those disclosed in the Previous EIR.

Emergency Access

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), adequate emergency vehicle access would be provided from Veronica Avenue and all internal roads would be designed to Alameda County standards. There would be no impact on emergency access to the site. Additionally, mitigation measures **Serv-1a** and **Serv-1b** (see Public Services – Fire Protection) would ensure that emergency vehicle access to the site is not restricted.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because adequate emergency vehicle access would be provided from Veronica Avenue and the internal road would be designed to Alameda County standards, there would be no impact on emergency access to the site. Additionally, mitigation measures **Serv-1a** and **Serv-1b** (see Public Services – Fire Protection) would ensure that emergency vehicle access to the site is not restricted. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on emergency access. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on emergency access beyond those disclosed in the Previous EIR.

Parking

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), three parking spaces per dwelling unit (two on-site, one off-site) would be provided, complying with the Alameda County Subdivision Ordinance. The Previous EIR found that there would be no impact on parking.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because the Project would provide 4.8 parking spaces per dwelling unit (two on-site and an average of 1.8 off-site), the Project would comply with the Alameda County Subdivision Ordinance. There would be no impact on parking. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact on parking. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on parking beyond those disclosed in the Previous EIR.

Alternative Transportation

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.12), the Previously Approved Project would create a safe internal street environment for pedestrians and bicycles by providing sidewalks and crosswalks. Additionally, AC Transit provides bus service on the 87 and NX4 lines on Center Street, which can be accessed by a short walk from the site. There would be no impact on alternative transportation.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Because the Project site is near AC Transit bus service lines and because the Project would create a safe internal street environment by providing sidewalks and crosswalks, there would be no impact on alternative transportation. Consistent with the conclusions of the Previous EIR, the Roberts Ranch Project would not result in a significant new impact on alternative transportation. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts on alternative transportation beyond those disclosed in the Previous EIR.

Conclusions – Transportation/Traffic

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant transportation and traffic impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to transportation and traffic not previously discussed.

XVII. Utilities and Service Systems

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
Would the project:			
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in construction of new water or wastewater treatment facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The existing conditions and immediate surroundings of the Project site remain generally unchanged from the Previous EIR.

Regional Wastewater Treatment Standards and Wastewater Treatment Facilities

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.13), the Original Project would add approximately 78 people to the Project area, resulting in a projected average dry-weather wastewater flow of approximately 6,800 gallons per day. The projected average wastewater flow (less than a 0.5% increase) would be consistent with General Plan growth projections, which would be considered less than significant.

Additionally, all wastewater generated by the Previously Approved Project would be directed into the Castro Valley Sanitary District's sanitary sewer system and would be routed to their Treatment Plant (which has adequate capacity), where it would be treated to meet all applicable RWQCB wastewater treatment standards. There would be no impact on wastewater treatment standards.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would add approximately 57 people to the Project area, 21 fewer people than under the Previously Approved Project, and thus generate less wastewater. Additionally, all wastewater generated by the Project would be directed into the Castro Valley Sanitary District's sanitary sewer system and would be routed to their Treatment Plant (which has adequate capacity to serve the Project). The impacts resulting from development of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR for wastewater treatment facilities; there would be no impact related to wastewater treatment standards. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to wastewater treatment. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to wastewater treatment beyond those disclosed in the Previous EIR.

Stormwater Drainage Facilities

Please refer to Section IX—Hydrology and Water Quality of this addendum for discussion of hydrological impacts particular to stormwater drainage facilities.

Water Supply

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.13), the Project site is not currently served by water distribution facilities. The extension of water distribution facilities to serve the site could impact water service operations in the area, and is considered to be potentially significant.

Additionally, the Original Project would add approximately 78 new residents to the East Bay Municipal Utility District (EBMUD) service area, resulting in a water demand of approximately 8,300 gallons per day.¹⁶ The water demands associated the Previously Approved Project would represent less than 0.005%

¹⁶ According to the California Department of Water Resources, the per capita residential water usage for the San Francisco Bay Area is approximately 106 gallons per day.

of the projected increase in water demand throughout the EBMUD service area. Although this impact is considered to be less than significant, mitigation measures were recommended to further reduce water demand.

The following mitigation measure was recommended in the Previous EIR to reduce the water supply impacts to a level of less than significant:

Util-1a: Water Conservation. The Project shall be designed in such a manner as to comply with the Model Water Efficient Landscape Ordinance (division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495), including water conservation programs and best management practices for water conservation.

EBMUD's Almond Pressure Zone serves development in the Project vicinity within elevation ranges of between 200 and 350 feet, and could provide service to the Project. EBMUD owns and operates distribution pipelines in Veronica Avenue and Crow Canyon Place which provide continuous service to EBMUD customers in the area. A main extension, to be constructed at the property owners' expense, would be needed to serve the Project area. The following mitigation measures were recommended in the Previous EIR to comply with EBMUD standard procedures for providing water services:

Util-1b: Water Service Estimate. The Applicant shall contact EBMUD's New Business Office to initiate a water service estimate to determine the costs and conditions for providing water service. Detailed drawings of the bridge crossing for the Project should also be submitted to EBMUD as part of this process.

Util-1c: System Design and Fees. The Applicant shall include an on-site loop system, pay all applicable connection fees and pay all applicable service fees.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would add approximately 57 people to the Project area, 21 fewer people than under the Previously Approved Project, and thus generate less water demand. The impacts related to water supply for the Project would be similar to those discussed in the Previous EIR; impacts related to the provision of water service would remain potentially significant. The mitigation measures **Util-1a: Water Conservation**, **Util-1b: Water Service Estimate**, and **Util-1c: System Design and Fees** recommended in the Previous EIR to address the potential impacts related to water supply remain applicable to the Roberts Ranch Project. Consistent with the conclusions of the Previous EIR, implementation of mitigation measures **Util-1a: Water Conservation**, **Util-1b: Water Service Estimate**, and **Util-1c: System Design and Fees** would reduce impacts to a less than significant level. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to water supply beyond those disclosed in the Previous EIR.

Solid Waste Disposal Capacity and Compliance with Solid Waste Regulations

Previous EIR Conclusions

As discussed in the Previous EIR (Chapter 4, Section 4.13), the Original Project would add approximately 78 new residents to the Castro Valley area, resulting in a solid waste disposal rate of approximately

1,000 total cubic yards per year¹⁷ for the Previously Approved Project. The solid waste produced would be well within the total remaining permitted capacity¹⁸ of Alameda County landfills, and the Previous EIR concluded that the impact would be considered less than significant.

Additionally, the Previously Approved Project would comply with all federal, state, and local statutes and regulations related to solid waste. There would be no impact related to waste disposal regulations.

Roberts Ranch Project Assessment

The Project would be mostly the same as the Previously Approved Project with a few minor changes, as indicated in **Table 1**. Development of the Project would add approximately 57 new residents to the Castro Valley area, 21 fewer people than under the Previously Approved Project, and thus would generate less solid waste. Additionally, all solid waste generated by the Project would be directed to the two landfills serving Alameda County (both of which have adequate capacity to serve the Project).¹⁹ The impacts resulting from development of the Roberts Ranch Project would be similar to and slightly reduced from those discussed in the Previous EIR for solid waste disposal. Consistent with the conclusions of the Previous EIR, the Project would not result in a significant new impact related to solid waste disposal. There are no changes in the Project or in circumstance, nor is there any new information that would result in a substantial increase in the severity of previously identified impacts related to solid waste disposal beyond those disclosed in the Previous EIR.

Conclusions – Utilities and Service Systems

Based on an examination of the analysis, findings, and conclusions of the Previous EIR, implementation of the Project would not substantially increase the severity of significant impacts identified in the Previous EIR, nor would it result in new significant utilities and service systems impacts that were not identified in the Previous EIR. The Project would not result in significant off-site or cumulative effects related to utilities and service systems not previously discussed.

¹⁷ Given a typical waste density of 80 pounds per cubic yard, the per capita disposal rate is 12.75 cubic yards per year according to the California Integrated Waste Management Board (now CalRecycle).

¹⁸ 110,113,205 cubic yards in 2005 according to the California Integrated Waste Management Board (now CalRecycle).

¹⁹ Tri-Cities Recycling and Disposal has closed since the 2005 Recirculated EIR. The total remaining capacity of the Altamont and Vasco Road landfills is 53,679,079 cubic yards according to CalRecycle.

XVIII. Mandatory Findings of Significance

	Equal or Less Severity of Impact Previously Identified in the Previous EIR	Substantial Increase in Severity of Previously Identified Significant Impact in Previous EIR	New Significant Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation

This Initial Study Determination indicates that there are no significant and unavoidable impacts related to biology, hydrology or water quality issues associated with the Project that would substantially degrade the quality of the environment. Implementation of the Project including its required mitigation measures would not threaten to eliminate a plant or animal, nor reduce the number nor restrict the range of a rare or endangered plant or animal species. There are no changes in the Project or in circumstance, nor is there any new information that would result in new significant environmental effects that would potentially degrade the quality of the environment, or a substantial increase in the severity of previously identified environmental effects that would potentially degrade the quality of the environment.

The Previous EIR found several cumulatively considerable impacts associated with development of the Project site pertaining to the issues of public services, recreation, and traffic. Mitigation measures are required of the Project to address these cumulative effects. These cumulative impacts were fully discussed and disclosed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any new information that would result in new significant cumulative environmental effects or a substantial increase in the severity of previously identified cumulative environmental effects.

The Project would result in a significant but short-term, temporary impact on air quality from construction-related activities, including dust and diesel emissions. This impact was fully discussed and disclosed in the Previous EIR. There are no changes in the Project or in circumstance, nor is there any

new information that would result in new significant environmental effects that would cause a substantial adverse effect on humans, or a substantial increase in the severity of previously identified environmental effects that would cause a substantial adverse effect on humans.

Summary of Significant Environmental Impacts and Mitigation Measures

A comparative summary of the significant impacts associated with the Previously Approved Project and the Roberts Ranch Project is presented in **Table 2**, along with a list of recommended mitigation measures. No new significant impacts or new mitigation measures resulting in significant secondary impacts have been identified in the CEQA Checklist. All identified significant impacts would be reduced to a level of less than significant with the implementation of the recommended mitigation measures.

Table 2: Comparative Summary of Significant Environmental Impacts and Mitigation Measures Previously Approved Project and the Roberts Ranch Project

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
Aesthetics and Visual Quality			
<p>Impact Vis-1: The addition of new homes on the Project site would add several new sources of light to the area. Light from inside and outside the homes, as well as street lighting could adversely affect nighttime views of nearby neighbors within the area.</p>	<p>Slightly reduced impact</p>	<p>MM Vis-1: Lighting Design Guidelines. The Applicant shall design lighting to be sensitive to neighboring land uses and to minimize energy use, according to standard County lighting guidelines. The Alameda County Planning Department shall review the design plans to ensure compatibility of the Project with all applicable guidelines. The general lighting guidelines for County projects include the following items:</p> <ul style="list-style-type: none"> • Applicant shall design public area lighting so as to evenly illuminate areas of concern, but so as not to intrude upon private areas any more than necessary. Public areas not essential to security should be illuminated only when necessary for occupation by use of timers or motion detector circuits. • Applicant shall use the lowest wattage lamps reasonable for illumination of the area of concern. • Applicant shall install only full cutoff-shielded lights for illumination of public areas. Non-shielded lighting presently in place shall be replaced when required only with shielded fixtures. • Applicant shall design and place night time lighting and security lighting so that it is no higher than necessary to illuminate the area of concern for security or visual comfort, and so that the lighting is directed toward the area of concern, and always below the horizontal. • Applicant shall not position night lighting to illuminate areas beyond the site boundaries, nor shall the applicant position general lighting to radiate above the horizontal, but shall place lights or install shielded lights to illuminate only the area 	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p style="text-align: center;">of concern.</p> <ul style="list-style-type: none"> • Residents shall extinguish any lights not required for onsite security reasons. • For any lighting on areas nonessential for security or active operations, applicant shall place lights on a motion detector circuit so illumination only occurs when required for occasional visibility. • The Homeowners Association shall enforce these conditions through CC&Rs for the Project. • Applicant shall submit a lighting plan for review and approval by the Planning Director prior to issuance of building permits. 			
Air Quality			
<p>Impact Air-1: Demolition of the existing structures, site grading, and the construction of new homes would have a short-term effect on air quality, primarily due to the generation of particulate matter. Particulate matter is normally generated by the disturbance of soils through excavation and grading, construction vehicle travel on unpaved surfaces, and the tracking of soils onto paved roads. Equipment exhaust emissions and demolition activities also contribute to particulate matter during construction activity.</p>	<p>Slightly reduced impact</p>	<p>Air-1a: Dust Control. The Project shall demonstrate compliance with all applicable County regulations and BAAQMD recommended operating procedures prior to issuance of building or grading permits, including standard dust control measures. The effective implementation of dust abatement programs, incorporating all of the following dust control measures, would reduce the temporary air quality impact associated with construction dust.</p> <ul style="list-style-type: none"> • During excavation, the construction area shall be watered using equipment and staff that are provided by the Project applicant or prime contractor, as needed, to avoid visible dust plumes. Appropriate nontoxic dust palliative or suppressant, added to water before application, may be used. • All trucks hauling soil, sand and other loose materials shall be covered or shall maintain at least two feet of freeboard. • All unpaved access roads, parking areas and construction staging areas shall be either paved, watered as necessary to avoid visible dust plumes, or subject to the application of (non-toxic) soil stabilizers. 	<p>Yes, as modified:</p> <p>Air-1a: Dust Control. The Project shall demonstrate compliance with all applicable County regulations and BAAQMD-recommended <u>BMPs operating procedures</u> prior to issuance of building or grading permits, including standard dust control measures. The effective implementation of dust abatement programs, incorporating all of the following dust control measures, would reduce the temporary air quality impact associated with construction dust.</p> <ul style="list-style-type: none"> • During excavation, the construction area shall be watered using equipment and staff that are provided by the Project applicant or prime contractor, as needed to avoid visible dust plumes. Appropriate nontoxic dust palliative or suppressants may be added to water before application. <u>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access</u>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<ul style="list-style-type: none"> • All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers as necessary to control dust and tracking of soil. • If visible soil material is carried onto adjacent public streets, these streets shall be swept daily with water sweepers. • All stockpiles of debris, soil, sand or other materials that can be blown by the wind shall either be covered or watered as necessary to avoid visible dust plumes. • An off-pavement speed limit of 15 miles per hour for all construction vehicles shall be incorporated into the construction contract and enforced by the prime contractor. • All inactive portions of the Project site (those areas which have been previously graded, but inactive for a period of ten days or more) shall be watered with an appropriate dust suppressant, covered or seeded. • All earth-moving or other dust-producing activities shall be suspended when the above dust control measures prove ineffective in avoiding visible dust plumes during periods of high winds. The wind speed at which this suspension of activity will be required may vary, depending on the moisture conditions at the Project site, but suspension of such miles per hour. <p>Air-1b: Diesel Emission Reduction. The Project shall demonstrate compliance with all applicable County regulations and operating procedures prior to issuance of building or grading permits, and shall use its best efforts to adhere to the following diesel reduction efforts:</p> <ul style="list-style-type: none"> • Diesel powered equipment shall be maintained in good working condition, with manufacturer-recommended mufflers, filters, and other equipment. 	<p><u>roads) shall be watered two times per day.</u></p> <ul style="list-style-type: none"> • All trucks hauling soil, sand and other loose materials shall be covered. or shall maintain at least two feet of freeboard. • All unpaved access roads, parking areas and construction staging areas shall be either paved, watered as necessary to avoid visible dust plumes, or subject to the application of (non-toxic) soil stabilizers. • <u>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.</u> • All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers as necessary to control dust and tracking of soil. • If visible soil material is carried onto adjacent public streets, these streets shall be swept daily with water sweepers. <u>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.</u> • All stockpiles of debris, soil, sand or other materials that can be blown by the wind shall either be covered or watered as necessary to avoid visible dust plumes. • <u>All vehicle speeds on unpaved roads</u>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<ul style="list-style-type: none"> • Diesel powered equipment shall not be left inactive and idling for more than ten minutes, and shall comply with applicable BAAQMD rules. • Alternative fueled construction equipment shall be used as feasible. • The hours of operation of heavy-duty equipment and/or the amount of equipment in use shall be limited to the extent feasible. 	<p><u>shall be limited to 15 miles per hour.</u> An off-pavement speed limit of 15 miles per hour for all construction vehicles shall be incorporated into the construction contract and enforced by the prime contractor.</p> <ul style="list-style-type: none"> • All inactive portions of the Project site (those areas which have been previously graded, but inactive for a period of ten days or more) shall be watered with an appropriate dust suppressant, covered or seeded. <u>at a frequency adequate to maintain minimum soil moisture of 12 percent.</u> <u>Moisture content can be verified by lab samples or moisture probe.</u> • All earth-moving or other dust-producing activities shall be suspended when <u>average wind speeds exceed 20 miles per hour.</u> the above dust control measures prove ineffective in avoiding visible dust plumes during periods of high winds. The wind speed at which this suspension of activity will be required may vary, depending on the moisture conditions at the Project site. • <u>Post a publicly visible sign with the telephone number and person to contact at the Air District 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.</u> <p>Air-1b: Diesel Particulate Matter Emission Reduction. The Project shall demonstrate</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
			<p>compliance with all applicable County regulations and operating procedures prior to issuance of building or grading permits, and shall use its best efforts to adhere to the following diesel reduction efforts:</p> <ul style="list-style-type: none"> <p>All construction Diesel-powered equipment shall be maintained <u>and properly tuned in accordance with manufacturer’s specifications, good working condition,</u> with manufacturer-recommended mufflers, filters, and other equipment. <u>All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</u></p> <p>Diesel-powered equipment shall not be left inactive and idling for more than ten minutes, and shall comply with applicable BAAQMD rules. Idling times shall be minimized either by <u>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]).</u> Clear signage shall be provided for <u>construction workers at all access points.</u></p> <p>Alternative fueled construction equipment shall be used as feasible. The Project shall develop a plan <u>demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned,</u></p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
			<p><u>leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.</u></p> <ul style="list-style-type: none"> • <u>Use low volatile organic compound (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).</u> The hours of operation of heavy-duty equipment and/or the amount of equipment in use shall be limited to the extent feasible.

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Air- 2: Demolition of the existing house, grading and the construction new homes would have a short-term effect on air quality, primarily due to the generation of particulate matter. Excessive particulate matter concentrations could affect nearby sensitive receptors.</p>	<p>No change</p>	<p>Mitigation: The Project applicant shall implement mitigation measures MM Air-1a and MM Air-1b.</p>	<p>Yes, as modified above and to include the following construction-period BMPS:</p> <p>Air-1b: Diesel Particulate Matter Emission Reduction. The Project shall . . . use its best efforts to adhere to the following diesel particulate matter reduction efforts:</p> <ul style="list-style-type: none"> • <u>Where access to alternative sources of power (i.e., the electrical grid) are available, portable diesel engines shall be prohibited.</u> • <u>All off-road equipment shall have engines that meet or exceed either U.S. Environmental Protection Agency (EPA) or CARB Tier 2 off-road emission standards, and/or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy.</u>
Biological Resources			
<p>Impact Bio-1: Construction and grading activities would result in limited, but potentially significant impacts on the Riparian Corridor on the Project site.</p>	<p>Slightly reduced impact</p>	<p>Bio-1a: Restricted Development within the Riparian Corridor. No grading or construction activities for proposed residential lots, including grading for yards, building pads or cantilevered decks, shall be allowed to encroach into the Riparian Corridor. To the extent that final design and construction activities would modify the Tentative Map, the Applicant shall adjust the site plan and grading to comply with this restriction by identifying feasible engineering/design solutions that can be implemented to avoid encroaching into the Riparian Corridor. To the extent that such engineering/design solutions may prove infeasible, the County shall require the applicant to fully avoid the impact by eliminating any such encroachments into the Riparian Corridor, and instead incorporating the remaining area into an open space parcel or Conservation Area. The following exceptions shall apply:</p>	<p>Yes, as modified:</p> <p>Bio-1a: Restricted Development within the Riparian Corridor is still applicable, but site plan and the grading plan for the Project have been designed to comply with the Riparian Corridor restriction by avoiding encroachment into the Riparian Corridor. The obligation to acquire permits from the CDFW, Corps, and RWQCB for the bridge, outfall, and sandbag wall remain, but have been substantially met through permit processes subsequent to the County’s prior 2005 Project approvals.</p> <p>Bio-1b: Riparian Restoration Plan remains applicable, but has been met through preparation of the <i>Roberts Ranch Biological Restoration Plan</i> (Zentner and</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<ul style="list-style-type: none"> • Grading and construction activities necessary for bridge abutments as necessary to construct the bridge across Crow Creek shall be allowed. Compensation for the loss of native trees and other vegetation to be removed shall be achieved through implementation of a Riparian Restoration Plan. • Grading and construction activities necessary for the storm drain outfall into Crow Creek shall be allowed. Compensation for the loss of native trees and other vegetation to be removed shall be achieved through implementation of a Riparian Restoration Plan. • Prior to construction, permits shall be acquired by the applicant from CDFW for the bridge, outfall, and sandbag wall, and any encroachment into the Riparian Corridor. Similarly, permits shall be acquired from the CDFW, Corps, and RWQCB prior to constructing the outfall, or sandbag wall. <p>Bio-1b: Riparian Restoration Plan. The graded and undisturbed lands adjacent to and within the Riparian Corridor that will not be subject to development activity shall be enhanced through a re-vegetation, monitoring, and maintenance program. This program shall offset the loss of native trees and herbaceous riparian vegetation resulting from the development project. The goal of the Riparian Restoration Plan is to enhance and restore a self-sustaining riparian woodland habitat supporting native trees, shrubs, and grasses, including species previously eliminated from the area. Requirements for the Riparian Restoration Plan shall include the following:</p> <ul style="list-style-type: none"> • The Riparian Restoration Plan shall provide for a replacement ratio of a minimum of 10:1 for the loss of riparian woodland trees and/or riparian woodland under-story vegetation. • All re-vegetation and restoration tasks shall be overseen by an ecological monitor, a qualified ecologist with experience in the areas of habitat 	<p>Zentner 2011) as submitted to the RWQCB. This Restoration Plan identifies approximately 0.31 acre of lower bank riparian woodland to be restored in areas that are currently un-vegetated and/or occupied by nonnative trees adjacent to the creek; approximately 0.54 acre of upper bank riparian oak woodland to be restored in areas that are dominated by nonnative trees or areas without tree cover; and approximately 1.21 acres of existing riparian oak woodland to be enhanced in areas where tree cover is sparse and the understory is dominated by nonnative species.</p> <p>Additionally, Bio1-b is modified to remove specific lots from the Previously Approved Project:</p> <p>d) Riparian woodland restoration would occur in the areas shown in Figure 5-5 of the Recirculated Draft EIR, on the peninsula of land south of (below) Lot 3, in the passive recreation area near the new bridge, in the recreation area identified immediately adjacent to (north of) Lot 27, and in identified locations along Crow Creek where riparian woodland enhancement opportunities are present. Other re-vegetation and restoration sites may be identified in coordination and consultation with the CDFW through the Fish and Game Code 1602 Streambed Alteration Agreement process required for this project.</p> <p>Bio-1c: Conservation Area also remains applicable. The means by which the</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>restoration.</p> <ul style="list-style-type: none"> All revegetation activities should be performed in the fall or winter months to enhance survival. Riparian woodland restoration would occur in the areas shown in Figure 5-5 of the Recirculated Draft EIR, on the peninsula of land south of (below) Lot 3, in the passive recreation area near the new bridge, in the recreation area identified immediately adjacent to (north of) Lot 27, and in identified locations along Crow Creek where riparian woodland enhancement opportunities are present. Other re-vegetation and restoration sites may be identified in coordination and consultation with the CDFW through the Fish and Game Code 1602 Streambed Alteration Agreement process required for this project. Riparian woodland restoration and enhancement activities shall proceed according to the requirements provided in Appendix C of the original Draft EIR. These restoration and enhancement requirements provide guidelines for planting, irrigation, maintenance and monitoring. <p>Bio-1c: Conservation Area. Prior to, or concurrent with the filing of final maps for the Project, all areas of the Riparian Corridor (with the exception of specific locations where development activities have been permitted) shall be described as a Conservation Area. The Conservation Area shall be preserved and managed in perpetuity for the conservation of biological resources.</p> <ul style="list-style-type: none"> Means by which this Conservation Area may be preserved include placing these lands into a conservation easement that is granted by the landowner to a conservator that meets California and Civil Code Section 815, et seq., with the terms of the easement recorded/noticed on the property deed and included within the terms of the Codes, Covenants and Restrictions for the 	<p>Conservation Area will be preserved by granting a conservation easement to a conservator meeting qualifications defined in California and Civil Code Section 815, et seq., has not yet been determined.</p> <p>Bio-1d: Allowable Uses within the Conservation Area also remains applicable, and will need to be established within the terms of the Conservation Easement.</p> <p>Bio-1e: Fencing also remains applicable to the Roberts Ranch Project and subject to County’s final Design Review approval.</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>Project. Possible conservators include the CDFW or any other qualifying tax-exempt nonprofit organization which has as its primary purpose the preservation of open space as set forth at California Civil Code 815 et seq.</p> <ul style="list-style-type: none"> • Alternatively, the Conservation Area may be transferred in fee title to an entity that will protect the open space values of this area in perpetuity. Possible fee title owners of the Conservation Area include a homeowners association established for the Project, the County, the Park District (i.e., Hayward Area Recreation and Park District or East Bay Regional Park District), CDFW or other public agencies. If any owner is not a qualified conservation organization as set forth at California Civil Section 815 et seq., a conservation easement shall also be recorded over the Conservation Area by a conservation organization that meets the requirements set forth in California and Civil Code Section 815, et seq. • A County Service Area, Landscape and Lighting District, assessment district or other such funding source shall be established to provide for a permanent and stable funding source for on-going maintenance and management of the Conservation Area, paid for by the Project property owners. • The terms of the easement/title transfer shall be approved by the CDFW and any other applicable federal or state resource agency. <p>Bio-1d: Allowable Uses within the Conservation Area. Within the Conservation Area all development activity shall be prohibited, and allowable uses and management activities shall be limited to the following types/examples:</p> <ul style="list-style-type: none"> • Native and riparian vegetation restoration and enhancement 	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Bio-2: Construction and grading activities would result in significant impacts related to the loss of native trees that are located outside of the Riparian Corridor.</p>	<p>Slightly reduced impact</p>	<ul style="list-style-type: none"> • Creek stability work as required by the Public Works Agency • Selective tree pruning, selective removal of dead or dying vegetation that presents a fire hazard, and other selective fuels management activities as determined to be necessary by the Alameda County Fire Department to provide for adequate public safety and fire protection • Passive recreation including pedestrian trails, seating facilities and nonstructural creek overlooks • Mosquito abatement and other types of maintenance activities necessary to protect general health and safety • Access for maintenance of the bridge, storm drain outfall structure, and fences (as applicable) • Monitoring of cut and/or fill slopes for signs of instability or erosion, and necessary corrective actions as approved by Public Works <p>Bio-1e: Fencing. All private backyard spaces and/or publicly accessible space within the Project shall be separated from the Conservation Area by installation of a permanent fence. This fence should be designed as an attractive “view fence.” to accommodate views of the creek channel and otherwise enhance resident enjoyment of the creek while maintaining a permanent boundary for the Conservation Area. Any fence installed must be permanently maintained through a County Service Area, Landscape and Lighting District, assessment district or other such funding source that is established to provide for permanent and stable funding for on-going maintenance.</p> <p>Bio-2a: Minimizing the Loss of Non-Riparian Native Trees. Grading and construction activities outside the Riparian Corridor shall occur such that the loss of native trees is minimized to the greatest extent feasible. Feasibility (as used in this context) is defined as</p>	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>solutions that can be implemented to save a native tree without requiring a change in the proposed site plan, lot location or grade elevation. Compensation for the loss of native trees that are not located within the BRA and that cannot be feasibly saved and must be removed shall be achieved through implementation of the Native Tree Restoration and Replacement Plan. Non-native trees outside the Riparian Corridor may be removed at the discretion of the developer.</p> <p>Bio-2b: Native Tree Replacement Plan. Lands adjacent to and within the Riparian Corridor shall be enhanced through a re-vegetation, monitoring, and maintenance program to offset the loss of native trees as a result of the development project. The goal of the Replacement Plan is to enhance and restore a self-sustaining woodland habitat supporting native trees, shrubs, and grasses. Requirements for the Native Tree Replacement Plan shall include the following:</p> <ul style="list-style-type: none"> • The native tree restoration and enhancement plan shall provide for a minimum of a 2:1 replacement ratio for loss of native trees. • All re-vegetation activities shall be overseen by an Ecological Monitor, a qualified ecologist with experience in the areas of habitat restoration. • All revegetation activities should be performed in the fall or winter months to enhance survival. • Native tree replacement shall occur in the areas shown in Figure 5-5 of the 2005 Recirculated EIR in the oak woodland planting zone, the upper portions of the existing eucalyptus patches and the woodland enhancement zone areas. Other revegetation and restoration sites may be identified in coordination and consultation with the CDFW. • Restoration and enhancement activities shall proceed according to the requirements provided in Appendix C of the original Draft EIR. These restoration and enhancement requirements 	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Bio-3: Construction barriers left in Crow Creek during construction would potentially create significant wildlife movement restrictions.</p>	<p>No change</p>	<p>provide guidelines for planting, irrigation, maintenance, and monitoring. Salient points of restoration include:</p> <ul style="list-style-type: none"> ○ All planted native trees shall include installation of an irrigation system. The irrigation system shall have all irrigation valves wired to clocks that will facilitate consistent, regular watering. ○ Irrigation will occur over a three to four-year establishment period and terminated in the fall of the third or fourth year. A restoration ecologist shall determine when irrigation should be cut back and then terminated. ○ Monitoring shall occur over a ten-year period. ○ Alameda County, the CDFW, and the RWQCB shall be provided with annual monitoring reports. ○ At the end of the ten year monitoring period at least 90 percent of the installed plants shall be healthy or else replanting and subsequent establishment irrigation shall be required for an additional three years. <p>Bio-3a: Bridge Construction Barrier Removal. During construction of the bridge, ensure that no barriers are constructed across the creek and left in place overnight. Reduce disturbance of native ground cover and the soil surface to the maximum extent practicable.</p> <p>Bio-3b: Construction Period. No construction work will be allowed in the Creek or riparian woodlands between October 15 and April 15, with the exception of planting or related activities. Bridge construction activities will be concluded between June 15 and October 15, when steelhead are not expected to be in this reach of Crow Creek, or as otherwise conditioned by the NMFS. In addition, BMPs will be employed during construction to minimize and/or prevent water quality impacts on Crow Creek. Silt fencing backed by hay bales will be installed</p>	<p>Yes</p>

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<p>Impact Bio-4: Construction activities and overall conversion of the Project site to a residential use may affect special status species.</p>	<p>No change</p>	<p>along the top-of-bank to prevent sediment or construction materials from rolling down the banks. In addition, a hammock, or similar material, will be deployed over the creek during construction to capture any debris that could fall into the creek.</p> <p>Bio-3c: Creek Area Construction Requirements. All work conducted within the stream channel (i.e., rock slope protection placement and bridge construction) shall be conducted during times of low flow. Cofferdams should be used to divide the construction zone from the centerline of the creek to avoid interrupting flows during construction. Engineering plans should designate grading and construction areas including site access, equipment access, and staging areas that minimize disturbance to riparian vegetation.</p> <p>Bio-3d: Bridge Lighting. Lighting on the bridge shall be designed so that all street lights consist of modified beam lights that are directed down onto pavement sections only, and that specifically do not illuminate the surrounding environment.</p> <p>Bio-4a: Pre-Construction Surveys. Pre-construction surveys shall be conducted by a qualified biologist prior to any ground disturbance no more than 30 days prior to construction and preferably no more than 60 days.</p> <p>Bio-4b: Buffer Zones. If pre-construction surveys locate special status species on the Project site, a construction-free buffer zone shall be established by the biologist in consultation with CDFW.</p> <p>Bio-4c: California Red-legged Frog Consultation. As part of the permitting process, the applicant shall request that the Corps consult with the USFWS using their January 26, 1999 Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog (herein referred to as Programmatic Consultation). If the Corps</p>	<p>Bio-4c: California Red-legged Frog Consultation has effectively been implemented with issuance of the Section 7 Consultation for the Boundary Creek Subdivision Project by the USFWS in November of 2006.</p> <p>Bio-4a: Pre-Construction Surveys and Bio-4b: Buffer Zones have been further clarified and defined pursuant to the USFWS itemized programmatic conservation measures, required compensation program, monitoring requirements, and terms and conditions implementing reasonable and prudent measures to minimize the potential of red-legged frog mortality, harm, and harassment. The Project will be required to</p>

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		<p>allows the Project to proceed forward under the Programmatic Consultation (as evidenced in an issued Corps permit), the avoidance and protection measures presented in the USFWS Programmatic Consultation will be implemented for this Project. These protection measures include having a biological monitor present during all work in the creek channel, installing frog exclusion fencing on the up and downstream ends of the work area, implementing an employee education program, and dewatering the creek channel (use of coffer dams) immediately prior to work so that the work area does not serve as an attractant to California red-legged frogs. While dewatering the construction area, a biological monitor would remain onsite to remove any frogs trapped in the enclosed work area. The biological monitor would remain on site during all work in the creek channel (creek includes bed, bank, channel).</p> <p>As an alternative to this approach, pursuant to the 1997 USFWS guidelines for conducting California red-legged frog site assessments and surveys, a formal California red-legged frog assessment would be submitted to the USFWS requesting permission to conduct a protocol survey for California red-legged frog. If approved by the USFWS, protocol surveys for California red-legged frogs should be conducted by a USFWS authorized California red-legged frog biologist between May 1 and November 1. The results of the survey would be submitted to the USFWS. If no California red-legged frogs are found during the USFWS approved surveys, then there would be no further requirements for the red-legged frog. If the California red-legged frog is found during surveys, or if the USFWS assumes presence of this frog and declines to approve surveys, then the applicant shall be required to obtain an incidental take permit from the USFWS prior to any ground breaking at the project site. A copy of the incidental take permit (also known as a “non-jeopardy” biological opinion) shall be submitted to the Alameda County Planning Department prior to any</p>	<p>implement each and all of these identified measures pursuant to issuance of the Corps’ Nationwide Permits (NWPs) 7 – Outfall Structures, and 33 – Temporary Construction, Access and Dewatering, most recently reissued in September 2014.</p>

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<p>Impact Bio-5: Development of the Project site with residential uses, the construction of a bridge over Crow Creek and the placement of a storm drain outfall into Crow Creek would result in water quality impacts on the creek.</p>	No change	<p>ground breaking.</p> <p>Mitigation: The Project applicants shall implement mitigation measures Hydro-1a: SWPPP Regulatory Compliance, Hydro-1b: Storm Water Quality Control Plan BMPs, Hydro-1c: RWQCB Water Quality Certification, Hydro-2a: Post-Construction BMPs, and Hydro-2b: Post-Construction BMP Design Criteria.</p>	Yes
Cultural Resources			
<p>Impact Archeo-1: It is possible that archaeological, paleontological or prehistoric resources, as well as interred human remains could be discovered during the demolition, site preparation, and construction of the Project.</p>	No change	<p>Archeo-1a: On-Call Archaeologist. Prior to the initiation of construction or ground-disturbing activities, the Project applicant shall retain a professional archaeologist to remain on-call throughout any Project ground-disturbing construction activities for consultation and the review and evaluation of any unexpected discoveries of significant archaeological resources. The on-call archaeologists shall also inform all personnel connected with construction of the Project of the possibility of finding archaeological resources (e.g., human remains, artifacts, bedrock, bone, or shell).</p> <p>Archeo-1b: Monitoring. Archaeological monitoring of subsurface construction shall occur during surface clearing, grading, and excavations for the proposed bridge abutments, the storm drain outfall, and for utilities and sewers. Monitoring on either a full-time or intermittent basis shall be up to the discretion of the Project Archaeologist depending on their assessment of the potential for the exposure of significant archaeological resources.</p> <p>Archeo-1c: Archaeological Discovery. If such resources are encountered during construction, all work will be halted with a 30-foot radius of the findings and a qualified archaeologist shall be retained to ascertain the nature of the discovery. Mitigation measures recommended by the archaeologist and approved by the Planning Director shall be implemented.</p> <p>Archeo-1d: Human Remains. Additionally, if human</p>	Yes

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		<p>remains are found within the Project Area, State law (CEQA Section 15064.5 and the Health and Safety Code Section 7050.5) requires the following steps to be taken:</p> <ul style="list-style-type: none"> • There shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until the County Coroner is contacted; • If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours; • The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent; • The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. <p>Archeo-1e: Archaeological Monitoring Closure Report. An Archaeological Monitoring Closure Report shall be completed by the Project Archaeologist upon the completion of monitoring. A copy shall be filed with the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park (California Historical Resources Information System/Northwest Information Center) and with the Director, Alameda County Development Planning.</p> <p>Archeo-1f: Caltrans Notification. Prior to initiating grading or construction activities, the Applicants shall notify Caltrans of their intent to develop the Project site in order to promote proper stewardship of a recorded archaeological site. The Applicants shall also submit a set of development plans to Caltrans that show the Project boundaries, and encourage Caltrans to</p>	

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		implement adequate access barriers to their property.	
Geology and Soils			
Impact Geo-1: Future development on the Project site could expose people or property to seismic ground shaking.	No change	<p>Geo-1a: Criteria for Foundation Design. All building foundation design shall be subject to compliance with the California Building Code. In addition, development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to the following:</p> <ul style="list-style-type: none"> • The footings should be at least 12 inches in width. In addition, footings located adjacent to utility trenches should have their bearing surfaces below an imaginary one horizontal to one vertical plane projected upward from the bottom edge of the trench. • The foundations may be designed for an allowable axial soil bearing pressure of 1,500 pounds per square foot for dead plus live load, with a one-third increase for any transient load (including wind or seismic). • All footings for a given structure should bear either on two or more feet of soil or entirely on rock. The weight of foundation concrete below grade may be neglected in sizing computations. All footings should be reinforced as required by the structural designer to provide structural continuity, to permit strong spanning of local irregularities, and to be rigid enough to accommodate potential differential movements on the order of one-half inch over 20 lineal feet. • The foundation excavations should be clean (i.e., free of all loose slough) and dry prior to placing steel and concrete. Concrete should be pumped 	Yes

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>or placed by means of a tremie or elephant's trunk to avoid aggregate segregation and earth contamination (i.e., concrete should not be chuted against the excavation sidewalls) for excavations over five feet deep.</p> <ul style="list-style-type: none"> Structural stability of the rebar reinforcement should be maintained during concrete placement to prevent buckling. The concrete should be properly vibrated to mitigate formation of voids and to promote bonding of the concrete to steel reinforcing. <p>Geo-1b: Lateral Resistance. Resistance to lateral forces could be computed by either frictional resistance or passive pressure; if both are combined, then the lesser should be reduced by 50 percent. An allowable friction factor of 0.17 is estimated between the surface of mass concrete and the adjacent soil; or, for rock, 0.35. Allowable passive earth pressure applied against vertical faces of the foundation is estimated to be about 175 pounds per cubic foot (equivalent fluid pressure).</p> <p>Geo-1c: Slab-on-Grade Floor Support. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to:</p> <ul style="list-style-type: none"> The sub grade soils should be maintained at 2 to 4 percent above the compaction moisture content, as affirmed by the Geotechnical Engineer within 24 hours of slab concrete placement. The floor slabs should not be placed on a dry sub grade. The slabs should be designed to float—move differentially with respect to the footings. 	

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<p>Impact Geo-2: Future development on the portions of the Project site (Lots 9, 10, 11, and 12) could expose people or property to damages associated with liquefaction.</p>	<p>No change in impact other than modification from Lots 9 through 12 to Lots 16 through 19 to be consistent with current site plan.</p>	<ul style="list-style-type: none"> • Slab thickness and reinforcement should be as required by the structural designer, based on an estimated modulus of sub grade reaction of 100 psi/in. • The floor slabs should be underlain by a 4-inch thick layer of crushed washed rock which is intended to serve as a capillary moisture break and to provide uniform slab support. Gradation of this material should be such that 100 percent will pass a 1-inch sieve and 0 to 5 percent passes the No. 4 sieve. We recommend a 10-mil moisture vapor barrier (sealed at all laps, splices, penetrations, etc.) be placed above the gravel moisture break. The vapor barrier should extend laterally into the footings. If maximum two-inches of sand should be placed above the membrane, then we recommend a moisture barrier be placed against the outer face of the perimeter footing. Further resistance to moisture vapor intrusion could be achieved with proper curing of the concrete, adding a sealant to the mix (e.g., Moxie), having a mix design with low slump (we suggest 2 to 4 inches), low water/cement ratio (we suggest not greater than 0.45), and high strength (we suggest at least 4000 psi). The exterior ground surface should be at least 6 inches below the top of the floor slab. • All surfaces should slope to drain away from all sides of each building. <p>Geo-2: Foundation Design, Liquefaction Potential. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with</p>	<p>Yes, as modified:</p> <p>Geo-2: Foundation Design, Liquefaction Potential. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and</p>

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<p>Impact Geo-3: Construction on the Project site would occur on slopes that could become unstable during a major seismic event. Additionally, the Project proposes extensive cut and fill grading that could create new, unstable soil conditions on the site.</p>	<p>Slightly reduced impact</p>	<p>these reports, foundation designs may include, but shall not be limited to reinforced shallow foundations (post-tension slabs) for homes on Lots 9 through 12, and slope buttressing along the edge of Crow Creek.</p> <p>Geo-3a: Deepened Footings. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study⁴, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.</p> <p>Structures whose footings are on or within fifteen feet of the slope should be deepened and stepped down as designed by the structural designer such that the bottom of the footing is below an imaginary horizontal line projected into the slope at a point that is five feet downhill along the ground surface from where the downhill vertical face of the footing intercepts the slope face.</p> <p>Geo-3b: Erosion Control. Slopes shall be protected from erosion as designed by a Civil Engineer and/or landscape architect. Even though water from surface and/or groundwater sources would be controlled and/or diverted to the storm drain system, there is unknown potential for instability to occur due to outside influences such as natural weathering, prolonged heavy torrential rainstorms and/or continued cutting into the toe of the slope by the creek.</p> <p>Geo-3c: Monitoring. After all construction activity is</p>	<p>subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, foundation designs may include, but shall not be limited to reinforced shallow foundations (post-tension slabs) for homes on lots 9-16 through 12-19, and slope buttressing along the edge of Crow Creek.</p> <p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>complete, the slopes shall be monitored by a certified geotechnical engineer or engineering geologist. The lowest level of monitoring would be a site reconnaissance after a significant seismic event to determine, based on observation of surficial features, if slope instabilities appear imminent, or have occurred. A higher level of monitoring would be the field reconnaissance together with the surveyor setting monuments and resurveying them to check for movements (both lateral and vertical).</p> <p>Geo-3d: Retaining Wall Design. Specific geotechnical design parameters for all retaining walls along the edge of slopes, shall be determined when the source of fill is established, and after testing of that fill has been performed. Any retaining wall design shall be subject to the recommendations of the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geological Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, the following is tentative criteria for design of the walls and subject to modification upon further Project earthwork definition:</p> <ul style="list-style-type: none"> Retaining walls should be designed to be capable of moving, such that the top of the wall is free to deflect or rotate at least 0.1 percent of the wall height if subjected to an ultimate active earth pressure of 31 pounds per cubic foot (pcf), equivalent fluid pressure. If a wall cannot move the required amount, then the wall should be designed to resist an ultimate at-rest earth pressure of 50 pcf for granular material, for equivalent fluid pressure. The preceding values are predicated on complete drainage of the wall backfill. Surcharge loads from adjacent permanent construction, building foundations, construction 	

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<p>Impact Geo-4: Land clearing, grading, cut and fill operations and any other site preparation activities and installation of impervious surfaces such as asphalt roads will increase the risk of soil erosion and loss of</p>	<p>Slightly reduced impact</p>	<p>activities, traffic, slopes, etc., also should be taken into consideration.</p> <ul style="list-style-type: none"> • Drainage of the walls should be accomplished using a full wall drainage blanket or a pre-manufactured wall drainage system. The drainage blanket materials, if selected for use, should consist of Class 2 permeable material per Section 68-1.025 of the Caltrans Standard Specifications. The drainage blanket should be at least 12 inches thick and placed to within 12 inches of the top of the wall. The drainage rock should be enveloped in geotextile drainage fabric. The fabric should be installed per the manufacturer's criteria. Water collected at the bottom of the drainage blanket may be transmitted away from the wall by a perforated pipe or weep holes. The pipe should be at least four inches in diameter with the perforations placed down on top the geotextile fabric. The pipe should daylight at a lower grade line, or connect to a sump, storm drain or other suitable disposal facility. Weep holes should be at least two inches in diameter and spaced not more than six feet on centers. • Wall backfill within the zone defined by a plane sloping up from the bottom of the wall at 1 Horizontal: 1 Vertical should be constructed as engineered fill using a select, non-expansive, granular soil. Care should be taken to avoid excessive pressures against walls during backfilling, and it is recommended that walls be braced during the backfilling operation. The backfill should be compacted to at least 90 percent relative compaction per ASTM D 1557. <p>Geo-4a: Site Clearing and Stripping. The construction area should be clear of all obstructions including any existing fill, vegetation, debris, rubble, rubbish, and any loose, wet, soft or disturbed soils. Any pits, cisterns, septic tanks, leach fields, etc., that might be</p>	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
topsoil.		<p>encountered, should also be cleaned out and/or removed. Trees to be removed should have their entire root bowls cleared of all roots and loose soils.</p> <ul style="list-style-type: none"> • All excavations resulting from the clearing operations should be cleared to expose firm, undisturbed earth material and backfilled with approved compacted earth materials. • In conjunction with clearing, the building and pavement areas should be stripped to sufficient depth to remove all organic laden topsoil. The actual stripping depth should be determined by our representative at the time of construction. The cleared and stripped materials should be removed from the site or stockpiled for possible use as landscape materials. <p>Geo-4b: Slopes and Drainage. Permanent excavation and embankment slopes in soil should be graded at an inclination of 2 horizontal to 1 vertical or flatter. The crowns of all slopes should be constructed so that surface runoff water is not allowed to flow over the faces of the slopes.</p> <ul style="list-style-type: none"> • Soils are considered moderately susceptible to erosion where drainage concentrations occur. The rock is considered to have low susceptibility to erosion. • Concentrated flowing water should be either dissipated or channeled to appropriate discharge facilities, as determined by the general Civil Engineer and shown on his erosion and grading plan. • Positive surface gradients should be provided adjacent to the buildings and pavement areas to direct surface water away from the foundations and pavements toward suitable discharge facilities. • Ponding of surface water should not be allowed on or adjacent to the pavement. 	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Geo-5: Construction of the proposed Project could expose people or property to unstable soils, adverse engineering properties or geologic units.</p>	<p>No change</p>	<p>Geo-5a: Foundation Design, Clay Soils. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. In order to develop foundation design criteria for posttension slab design, Atterberg Limits Tests have been performed on samples of the clay and used the procedures according to the Post-Tensioning Institute design manual entitled "Design and Construction of Post Tensioned Slabs-On-Ground" (1996). Consistent with these reports, foundation designs may include, but shall not be limited to the following:</p> <ul style="list-style-type: none"> • All slab foundations be designed by and be post-tensioned as required by the structural designer to act as a unit, to provide structural continuity and to permit strong spanning of local irregularities. • Assure that at least two feet of granular soil is beneath any reinforced footings and slabs-on-grade. • Lime treatment of the uppermost two feet of clay soils should also be considered. • A higher level of mitigation would be to install cast-in-drilled hole (CIDH) piers or deepened footings that penetrate deep into the clay soil in conjunction with free-floating the slab-on-grade. <p>Geo-5b: Foundation Bearing. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required</p>	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>by Alameda County prior to final maps and building permits. Consistent with these reports, the foundation system for any individual structure should bear on the same type of earth material-- either on two or more feet of soil or entirely on rock.</p> <p>Geo-5c: Sub-Grade Preparation. All building foundation design shall be subject to compliance with the California Building Code. In addition, all future development within the Project site shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits.</p> <ul style="list-style-type: none"> • Once the construction areas have been cleared, and any excavations made, the soils exposed in those areas to receive engineered fill, pavement and slabs-on-grade should be scarified to at least 6 inches. • The loosened soils should be uniformly moisture conditioned to 1 to 3 percent over optimum and compacted to the requirements for engineered fill. Inability to achieve the stated compaction could be used as a further criteria for the removal of loose and/or wet, soft soils or for the need of special stabilizing measures. <p>Geo-5d: Material for Fill. All on-site earth materials which are free of significant vegetation (not more than 2 percent) and other undesirable, deleterious substances; which have a plasticity index of 15 or less; which do not contain rocks or lumps greater than 4 inches in greatest dimension with not more than 15 percent larger than 22 inches; and, which are pre-approved by the Project geotechnical engineer are considered suitable for use as fill. Samples from borrow areas should be obtained for laboratory testing (if required) at least four days prior to any material being used/imported to the site.</p>	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>Geo-5e: Compaction. All building foundation design shall be subject to compliance with the California Building Code. Consistent with this requirement, compaction requirements may include, but shall not be limited to the requirement that loosened native sub-grade soils and engineered fill should be uniformly compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D 1557.</p> <ul style="list-style-type: none"> • The uppermost six inches of flatwork and pavement sub-grade soils should be uniformly compacted to 90 percent at 2 to 4 per cent over optimum. • Fill materials should be spread and compacted in lifts not exceeding 8 inches in un-compacted thickness. The moisture content of fill materials should be determined based upon the compaction characteristics of the earth material. If construction proceeds during or shortly after the wet winter months, it may require time to dry the on-site soils since their moisture content will probably be appreciably above the optimum. • In addition, if subgrade soils are wet at the time of construction, they could be rutted, loosened or otherwise disturbed to several feet of depth by the construction equipment and require additional over excavation and/or stabilization. • Construction occurring in later summer or early fall (subsequent to the on-site earth materials becoming relatively dry) may require substantial amounts of water to be added during earthwork operations to enable the appropriate moisture content and compaction to be achieved. <p>Geo-5f: Sulphate Presence and Corrosion Potential. Upon completion of earthwork construction, testing of the soil for sulphates and evaluation of corrosion potential shall be conducted.</p>	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Geo-6: Construction of the Project’s proposed bridge over Crow Creek could be susceptible to unstable soils, adverse engineering properties or geologic units.</p>	<p>No change</p>	<p>Geo-6: Bridge Design. All bridge design and construction shall be subject to compliance with the California Building Code. In addition, the bridge design and construction shall be subject to the recommendations of the Preliminary Geotechnical Study, the Slope Stability Assessment, and subsequent Geologic Reports and Geotechnical Reports as required by Alameda County prior to final maps and building permits. Consistent with these reports, it is expected that the bridge could be supported upon cast-in-drilled hole piers, commonly referred to as drilled piers, designed in end-bearing. Specific design criteria should include the following:</p> <ul style="list-style-type: none"> • Each pier should extend at least 10 feet below the grade existing at the time of our field exploration. • The piers should bear on very dense earth materials (weathered to intact rock) indicated to be present at various depths in the borings. • Each pier should be at least 30 inches in shaft diameter. The piers should be at least three pier diameters apart, center-to-center. • Field and laboratory tests indicate that at the 10 foot depth, the pier may be designed for an allowable axial earth material bearing pressure of 4,800 pounds per square foot for dead plus live load, with a one-third increase for any transient load (including wind or seismic). The weight of the foundation below grade may be neglected in sizing computations for downward loading. The pier foundation should be designed by the structural engineer. • Ultimate pullout capacity (Tult) in pounds of the pier could be calculated by the following equation: $Tult = 58 DE^2$, where D = pier shaft diameter, in feet; and, E = pier shaft embedment, in feet, into the soils. An appropriate factor of safety should be applied to the resulting uplift resistance. The 	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		weight of concrete below grade also may be incorporated into the uplift resistance.	
Hydrology and Water Quality			
Impact Hydro-1: Demolition, grading and construction activities could generate increases in the amount of sediment dissolved in runoff water and increase the amount of pollution discharged into Crow Creek.	Slightly reduced impact	<p>Hydro-1a: SWPPP Regulatory Compliance. The Project Applicant shall demonstrate compliance with the following regulatory requirements prior to commencement of construction activities:</p> <ul style="list-style-type: none"> • The developer shall submit a Notice of Intent to the State Office of Planning and Research and prepare and implement a SWPPP, as required by the NPDES General Permit. • The SWPPP shall be consistent with the terms of the General Permit, the Manual of Standards for Erosion and Sedimentation Control Measures by the Association of Bay Area Governments, policies and recommendations of the local urban runoff program (County of Alameda) and the Staff Recommendations of the RWQCB. • The SWPPP shall incorporate BMPs to reduce and treat runoff, and to control sediment and erosion during the construction process. • A copy of the SWPPP shall be made available at the Project site, but is not required to be submitted to the RWQCB. <p>Hydro-1b: Storm Water Quality Control Plan BMPs. BMPs shall be utilized during construction to ensure that erosion, runoff, and the alteration of existing drainage patterns from grading activities and Stormwater Quality Control Plan (SWQCP) to the County for review. The SWQCP shall include details on the BMPs to be implemented at the site during grading and construction.</p> <ul style="list-style-type: none"> • Stormwater drainage connections and runoff controls shall be designed and constructed prior to beginning demolition and/or grading in order to control any additional stormwater runoff created during these activities. Connections and flow 	Yes

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>controls shall be established based on estimated natural or current runoff, if needed.</p> <ul style="list-style-type: none"> • Non-structural BMPs shall be implemented, including minimizing disturbance of soils to the extent practical, preserving natural vegetation where possible and maintaining the site in clean condition using good housekeeping practices. The project site shall be maintained so that a minimum of sediment-laden runoff leaves the site. • Structural erosion control BMPs shall be utilized where appropriate, including mulch, grass and stockpile covers. Sediment controls shall be provided at the edge of disturbed areas including such facilities as silt fences, inlet protections, sediment traps and check dams. Silt fences or straw wattles shall be installed prior to any grading at the project site and shall be operable during the rainy season (October 15 to April 15). • Jute netting, plantings or other erosion control methods shall be placed down- slope of the retaining walls along those portions of the creek banks where retaining wall are proposed. • Grading at the Project site shall be limited to the excavation shown on the Vesting Tentative Subdivision Map. • Between October 15 and April 15, all paved areas shall be kept clear of earth materials and debris, and all sediment barriers shall be inspected and repaired at the end of each working day and, in addition, after each storm. • All graded or disturbed areas at the Project site shall be seeded immediately after grading is complete. Seeded areas which are disturbed by storms shall be repaired, re-seeded and mulched as soon as possible after being damaged. <p>Hydro-1c: RWQCB Water Quality Certification and Other Permits. The Project applicant shall apply to the</p>	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Hydro-2: Although the Revised Project includes routing of runoff through lawn areas and other pervious surfaces within yards and a central filtration system for treating surface runoff, the filter system is not fully designed or engineered.</p> <p>The Draft EIR recommendation for implementation of Tier 2 post-construction best management practices is effectively incorporated into Revised Project.</p>	<p>Slightly reduced impact</p>	<p>RWQCB for Clean Water Act Section 401 Certification and/or water discharge requirement under the Porter Cologne Act. For construction of the Project, the applicant shall submit a Notice of Intent to be covered under the General Permit for Discharges of Stormwater Related to Construction Activities, which is an NPDES permit. Additionally, the Project shall be designed to include post-construction BMPs consistent with the County’s NPDES permit for stormwater discharges.</p> <p>Hydro-2a: Post-Construction BMPs. The Project shall implement Tier 2 post-construction BMPs as defined in Table 2 of the Regional Board Staff Recommendations for New and Redevelopment Controls for Stormwater Programs section of Alameda County’s Stormwater Management Plan. Under Tier 2 BMPs, drainage from all paved surfaces, including streets, parking lots, driveways and roofs should be routed through an appropriate treatment mechanism before being discharged into the storm drain system. The BMPs are designed to meet the “maximum extent practicable” definition of treatment as specified in the federal Clean Water Act. Specific post-construction BMPs to be implemented at the Project site should include, but not be limited to the following:</p> <ul style="list-style-type: none"> • Minimize Directly Connected Impervious Area at Residential Lots. All rainfall from residential rooftops and in-lot impervious surfaces should be routed through lawn areas or other pervious surfaces within yards, where infiltration can filter pollutants through the soil before such runoff is “connected” to the storm drain system. Although existing soils on the Project Site have been identified as having moderate to moderately slow infiltration rates, the upper layers of soils generally consist sandy and silty clays for which infiltration-based stormwater management solutions can be effective. • Biofilters. Biofilters, also known as vegetated 	<p>Hydro-2a: Post-Construction BMPs and Hydro-2d: Biofilters remain applicable to the Project, but these BMPs and biofilters have been reviewed and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on the Roberts Ranch, Formerly Known as Boundary Creek, Post-Construction Stormwater Treatment Plan.</p> <p>Hydro-2b: Post-Construction BMP Design Criteria remains applicable to the Project, but has been completed, reviewed and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on the modeled 10-year storm event runoff from the Project site as modeled using the Hydrologic Engineering Center’s Hydrologic Modeling System (HEC-HMS).</p> <p>Hydro-2c: Minimized Directly Connected Impervious Area remains applicable to the Project, but has been completed, reviewed, and approved by the RWQCB pursuant to their 2014 Certification. That Certification was based on a design plan that included pervious concrete used for sidewalks, additional parking spaces along the access streets, the emergency vehicle</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>swales are vegetated slopes and channels that should be designed into the Project to transport shallow depths of runoff slowly over vegetation. Biofilters can be effective at the site if flows are slow and depths are shallow. This can generally be achieved by grading the site and sloping pavement in a way that promotes sheet flow of runoff. For biofilter systems, features that concentrate flow such as curb and gutter, paved inverts, and long drainage pathways across pavement must be minimized. The slow movement of runoff through the vegetation will provide an opportunity for sediments and particulates to be filtered and degraded through biological activity. A biofilter system may also provide an opportunity for stormwater infiltration which can further remove pollutants and reduces runoff volumes.</p> <ul style="list-style-type: none"> • Retention and detention. Retention and detention systems should be designed primarily to store runoff for one to two days after a storm prior to discharge into the creek, and will be generally dry until the next storm. A retention system should have a permanent pool that retains the runoff volume until it is replaced during the following storm. A properly designed retention/detention system will release runoff slowly enough to reduce downstream peak flows, allow fine sediments to settle and uptake dissolved nutrients in the runoff where wetland vegetation is included. Retention/detention systems are most appropriate for areas where soils percolate poorly such as the Project site. • Manufactured Treatment Systems. Where there are no opportunities for infiltration systems to provide adequate filtering and treatment of directly connected impervious areas (primarily on-site roadways), manufactured treatment systems should be incorporated into the storm drain 	<p>access road to Veronica Avenue, and the driveway to Lot 3, as well as bioretention treatment area being constructed at each residential lot to treat runoff from the rooftops.</p> <p>Hydro-2e: Final Design, Water Quality BMPs remains applicable to the Project. Design-level engineering plans for the Roberts Ranch Project shall be submitted to the Alameda County Public Works Clean Water Program pursuant to Final Subdivision Map and improvement plan approval, and similar design-level plans shall be re-submitted to the RWQCB (as may be required) pursuant to their permit approval process.</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>system prior to its outfall into Crow Creek. These devices are available from many manufacturers, and generally function to separate urban pollutants from runoff with such mechanisms as catch basins or inlet inserts, separators and/or media filters. These manufactured treatment systems can be inserted into a conventional conveyance storm drain system, and may potentially also supplement more integrative site planning and landscape strategies. They have minimal impact on reducing overall runoff volumes or mitigating peak flows. Other considerations include both initial expense and the cost of intensive, regular maintenance recommended by device manufacturers, which can include trash removal, replacement of filters, flushing cartridges, and vacuuming of sediment.</p>	
		<p>Hydro-2b: Post-Construction BMP Design Criteria. The Tier 2 post-construction BMPs shall be constructed to incorporate, at a minimum, hydraulic sizing design criteria to treat stormwater runoff:</p>	
		<ul style="list-style-type: none"> • Volume Hydraulic Design Basis: Treatment BMPs whose primary mode of action depends on volume capacity, such as detention/retention units or infiltration structures, shall be designed to treat stormwater runoff equal to: <ul style="list-style-type: none"> ○ the maximized stormwater quality capture volume for the area, based on historical rainfall records determined using the formula and volume coefficients set forth in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998), pages 175-175 (e.g., approximately the 85th percentile 24-hour storm runoff event); or ○ the volume of annual runoff required to achieve 80% or more capture, determined in accordance with the methodology set forth 	

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
		<p>in Appendix D of the California Stormwater Best Management Practices Handbook, (1993), using local rainfall data.</p> <ul style="list-style-type: none"> • Flow Hydraulic Design Basis: Treatment BMPs whose primary mode of action depends on flow capacity, such as swales, sand filters or wetlands shall be sized to treat: <ul style="list-style-type: none"> ○ 10% of the 50-year peak flow rate; or ○ the flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or ○ the flow of runoff resulting from a rain event equal to at least 0.2 inches per hour. <p>Hydro-2c: Minimized Directly Connected Impervious Area. Pursuant to Final Subdivision Map approval and/or Regional Water Quality Control Board permit approval, the applicant shall further explore opportunities to disconnect rainfall from residential rooftops and in-lot impervious surfaces from the storm drain system, and to increase the permeable surfaces of the developed site. Where feasible, runoff should be routed through lawn areas or other pervious surfaces within yards where infiltration can filter pollutants through the soil before such runoff is “connected” to the storm drain system.</p> <p>Hydro-2d: Biofilters. Pursuant to Final Subdivision Map approval and/or RWQCB permit approval, the applicant shall further explore opportunities to incorporate vegetative swales, planter boxes, and other types of biofilters into the design of the project (see Appendix Q of the 2005 Recirculated EIR: Post-Construction Stormwater Quality Treatment Options). Additional biofilters may be capable of reducing the minimum treatment volume of runoff that requires additional treatment at the detention basin, thereby potentially reducing the size requirements of the proposed</p>	

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<p>Impact Hydro-3: The Project would increase in the amount of impervious surface area, creating an increase in the amount of surface</p>	<p>Slightly reduced impact</p>	<p>detention facility.</p> <p>Hydro-2e: Final Design, Water Quality BMPs. Design-level engineering plans shall be submitted to the Alameda County Public Works Clean Water Program pursuant to Final Subdivision Map and improvement plan approval, and similar design-level plans shall be submitted to the RWQCB pursuant to their permit approval process. These engineering plans shall demonstrate how all Alameda County and RWQCB requirements for post-construction BMPs, consistent with the County’s NPDES permit for stormwater discharge, will be met. These plans shall also demonstrate how a comprehensive approach to water quality BMPs is to be implemented for the project.</p> <ul style="list-style-type: none"> • If less land is needed for a re-designed detention basin than is shown on the tentative map, the excess land shall remain within that portion of the site indicated as a water quality basin, and shall not be used to create an additional residential lot or to add to an existing residential lot. • In the event that detailed design-level engineering plans indicate a need for greater land are for the appropriate design of a detention basin, this land area shall not be derived from areas within the identified Riparian Corridor or within the creek bank setback as established pursuant to the Alameda County Watercourse Protection ordinance. <p>Any additional land as may be needed for a redesigned detention basin shall be derived from residentially planned land as shown on the Tentative Map. If land from residential lots is needed to accommodate a redesigned detention basin, this revision would not constitute a substantial change to the Tentative Map.</p> <p>Hydro-3: Detention of Increased Stormwater Flows. The Project’s storm drain system shall be designed to provide for over-sized underground conduits (pipes) and</p>	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
runoff that could exceed the capacity of downstream stormwater systems.		<p>detention basin that provide for the detention of increased storm water flows attributable to the Project. The amount of required detention storage shall be equal to the difference in volume of the increased runoff attributed to the Project’s computed runoff coefficient, less the volume of increased runoff already anticipated by the District at a runoff coefficient of 0.45.</p> <ul style="list-style-type: none"> • The required storage shall be computed using flood routing techniques with a unit hydrograph. The SCS method (e.g., TR-55) may be used to develop storm hydrographs and routing calculations when designing the storage and outlet drainage works. • Discharge from the conduit into Crow Creek shall be controlled by the outlet works to Crow Creek such that the predetermined discharge rate from the detention facility and the peak flow in Crow Creek are not exceeded. • The storage facility shall be designed such that the water surface returns to its base elevation within 24 hours. • Care should be taken to prevent siltation problems. • Assurances shall be provided for the continued maintenance of the storage and outfall facilities through a homeowners association established for the Project. 	
Noise			
Impact Noise-1: Construction Noise. Noise due to demolition, grading and other construction activities, as well as construction traffic along Veronica Avenue and Crow Canyon Place, would exceed County noise standards.	Slightly reduced impact	<p>Noise-1a: Construction Equipment Mufflers. Mufflers shall be used on all heavy equipment during construction activities.</p> <p>Noise-1b: Construction Hours. The Project should limit the operation of excessively noisy tools or equipment to the period between 7 a.m. and 7 p.m. on weekdays (except legal holidays) and between 8 a.m. and 5 p.m. on weekends. Additionally, adequate muffling and proper maintenance of all construction equipment at</p>	Yes

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>the Project site shall be required. Signs shall be posted to notify the adjacent residents of the period of construction with a name and phone number to call for noise complaints. The Applicant and the County shall agree on and perform an appropriate response and enforcement mechanism for all noise complaints.</p>			
<p>Public Services</p>			
<p>Impact Serv-1: The Project is located within a fire hazard severity zone, indicating that the potential for fire at the site is potentially significant.</p>	<p>No change</p>	<p>Serv-1a: Fire Access. The following design and operational considerations shall be incorporated into the project to provide suitable emergency access for fire apparatus:</p> <ul style="list-style-type: none"> • The emergency vehicle access road shall be increased to a 20-foot width. The gate, lock, and other obstructions for the emergency vehicle access road shall be approved by the Alameda County Fire Department. Grade transitions at the emergency vehicle access road shall demonstrate adequate approach and departure angles. • The inside radius of the curve on Crow Canyon Place at the bridge shall be increased to 50 feet. • Areas where parking is not permitted, including turnarounds and turnouts, shall be posted as fire lanes. Parking shall not be permitted on fire lanes, and should not occur on Crow Canyon Place or on Roberts Court. • The proposed bridge shall be designed to an HS-20 loading standard to accommodate fire equipment. <p>Serv-1b: Fire Protection. The following design and operational considerations shall be incorporated into the project to provide adequate fire protection:</p> <ul style="list-style-type: none"> • Fire hydrants and flow requirements shall be based on the codes and standards in effect at the time of building permit issuance, and based on the size of the building and type of construction. • Roofs within the Project shall comply at a minimum with Class B Fire rating, in accordance 	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
<p>Impact Serv-2: The generation of 20 students would contribute to the cumulative demand for school facilities.</p>	<p>Slightly reduced impact</p>	<p>with the Alameda County Building Code.</p> <ul style="list-style-type: none"> The project shall comply with applicable local and state regulations pertaining to wildland fire safety and defensible space, including the requirements of Appendix II-A of the Fire Code provisions. Allowable fire safety and defensible space planning activities include selective tree pruning, selective removal of dead or dying vegetation that presents a fire hazard, and other selective fuels management activities as determined to be necessary by the Alameda County Fire Department to provide for adequate public safety and fire protection. During demolition and construction, all requirements of Article 87 of the Fire Code regarding fire-safe construction practices shall be implemented by the contractor or project manager. <p>Serv-2: School Facilities Impact Mitigation Fee. The Applicant shall pay the required school facilities impact mitigation fee in order to ensure that the project bears the individual incremental share of improvements to accommodate the cumulative demand for school facilities resulting from the increase in student population.</p>	<p>Yes</p>
Recreation			
<p>Impact Rec-1: An increase of 78 additional park patrons would contribute to the cumulative demand for more park and recreation facilities.</p>	<p>Slightly reduced impact</p>	<p>Rec-1: Recreation Dedication In-Lieu Fee. The Applicant shall pay the required park dedication in-lieu fee in order to ensure that the Project bears the individual incremental share of improvements to accommodate the cumulative demand for park and recreation facilities resulting from the increase in population.</p>	<p>Yes</p>
Transportation and Traffic			
<p>Impact Traf-1: Peak hour vehicle trips generated by the Revised Project would cumulatively contribute to the violation of an</p>	<p>Slightly reduced impact</p>	<p>Traf-1: Traffic Fee. The Revised Project shall be assessed the County’s traffic impact fee, based on the number of</p>	<p>Yes</p>

Roberts Ranch Project Impact	Change from Previously Approved Project	Approved Mitigation Measures from Previous EIR	Still Applies?
ACCMA LOS standard.		residential units constructed.	
Utilities			
<p>Impact Util-1: The Project site is not currently served by water distribution facilities and the extension of such facilities will be required. The extension of water distribution facilities could impact water service operations in the area, and is considered to be potentially significant.</p>	No change	<p>Util-1a: Water Conservation. The Project shall be designed in such a manner as to comply with the Model Water Efficient Landscape Ordinance (division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495), including water conservation programs and best management practices for water conservation.</p> <p>Util-1b: Water Service Estimate. The Applicant shall contact EBMUD’s New Business Office to initiate a water service estimate to determine the costs and conditions for providing water service. Detailed drawings of the bridge crossing for the Project should also be submitted to EBMUD as part of this process.</p> <p>Util-1c: System Design and Fees. The Applicant shall include an on-site loop system, pay all applicable connection fees and pay all applicable service fees.</p>	Yes

Acronyms and Terms

2010 CAP	BAAQMD 2010 Clean Air Plan
AB	Assembly Bill
ACCMA	Alameda County Congestion Management Authority
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	methane
CNEL	community noise equivalent level
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
Corps	U.S. Army Corps of Engineers
cy	cubic yards
dba	A-weighted decibel
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
GHG	greenhouse gas
HEC-HMS	Hydrologic Engineering Center's Hydrologic Modeling System
I-580	Interstate 580
LOS	level of service
µg/m ³	micrograms per cubic meter
MTCO ₂ e	metric tons carbon dioxide equivalent
N ₂ O	nitrous oxide
NMFS	National Marine Fisheries Service
NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System

NWP	Nationwide Permit
Original Project	Original Boundary Creek Subdivision Project, 2004
PM _{2.5}	particulate matter, 2.5 micrometers or less
PM ₁₀	particulate matter, 10 micrometers or less
Previous EIR Project	Final Recirculated EIR, Boundary Creek Subdivision Project, 2005
Previously Approved Project	Revised Boundary Creek Subdivision Project, 2005
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SWPPP	Stormwater Pollution Prevention Plan
SWQCP	Stormwater Quality Control Plan
TAC	toxic air contaminant
Title 24	California's Energy Efficiency Standards for Residential and Nonresidential Buildings
URBEMIS	Urban Land Use Emissions Model
USFWS	U.S. Fish and Wildlife Service

Bibliography

Alameda County. Alameda County (Unincorporated Areas) Community Climate Action Plan, 2014.

_____. Safety Element of the Alameda County General Plan. February 2014.

_____. Recirculated Final Environmental Impact Report. Boundary Creek Subdivision, November 2005.

_____. Recirculated Draft Environmental Impact Report Boundary Creek Subdivision, August 2005.

_____. Draft Environmental Impact Report, Boundary Creek Subdivision, August 2004.

Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines, May, 2012.

_____. Source Inventory of Bay Area Greenhouse Gas Emissions. Website accessed at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/Emission-Inventory/Greenhouse-Gases.aspx>. February, 2010.

California Air Resources Board. Climate Change Draft Scoping Plan. June, 2008.

California Department of Conservation. Alameda County Important Farmland Map. Accessed at <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Alameda.aspx>,

California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2009, December 2011.

California Environmental Protection Agency. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF. March, 2006.

CalRecycle. Solid Waste Information System. Website accessed January 18, 2016 at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List?FAC=Disposal&OPSTATUS=Active®STATUS=Permitted>.

U.S. EPA. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2010, Table 2-1: Recent Trends in U.S. Greenhouse Gas Emissions and Sinks. April 15, 2012.

_____. 2010, Climate Change Indicators in the United States, p. 11. 2010.