FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

San Ramon Valley Fire Protection District Fire Station #32

County File #LP09-2026

(SCH #: 2010122077)

Prepared for

Contra Costa County

June 2011

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Project Description

Project Title:

San Ramon Valley Fire Protection District Fire Station #32
County File #LP09-2026

Lead Agency Name and Address:

Contra Costa County, Department of Conservation & Development (DCD), 651 Pine Street, 4th Floor, Martinez, CA 94553

Contact Person and Phone Number:

Ruben Hernandez, Senior Planner, (925) 335-1339

Project Location:

The approximately 1.1-acre project site is located at 2100 Stone Valley Road at the northeastern corner of the intersection of Stone Valley Road and Miranda Avenue in the unincorporated community of Alamo in Contra Costa County. **Figure 1** shows the location of the project site.

Project Concept*:*

The project would construct a new 9,400 square-foot, single-story fire station (station), replacing an existing 3,700 square-foot station located approximately 0.4-miles west on Stone Valley Road. The existing station was built in 1958 and is out-dated and cannot meet the current needs of the SRVFPD. The existing station would be closed once construction of the new station is complete. The new station would maintain the same operational features as the existing station, including six personnel working 48-hour shifts. The new station would also utilize the equipment that is currently in use at the existing station.

The proposed station includes offices and living quarters to house personnel during the 48-hour shifts, as well as an apparatus bay for storage of the fire engines when not on call. The proposed height of the station ranges from 20 feet at the dormitory portion of the building, 26.8 feet at the apparatus bay portion of the building, to 32.5 feet at the proposed tower feature.

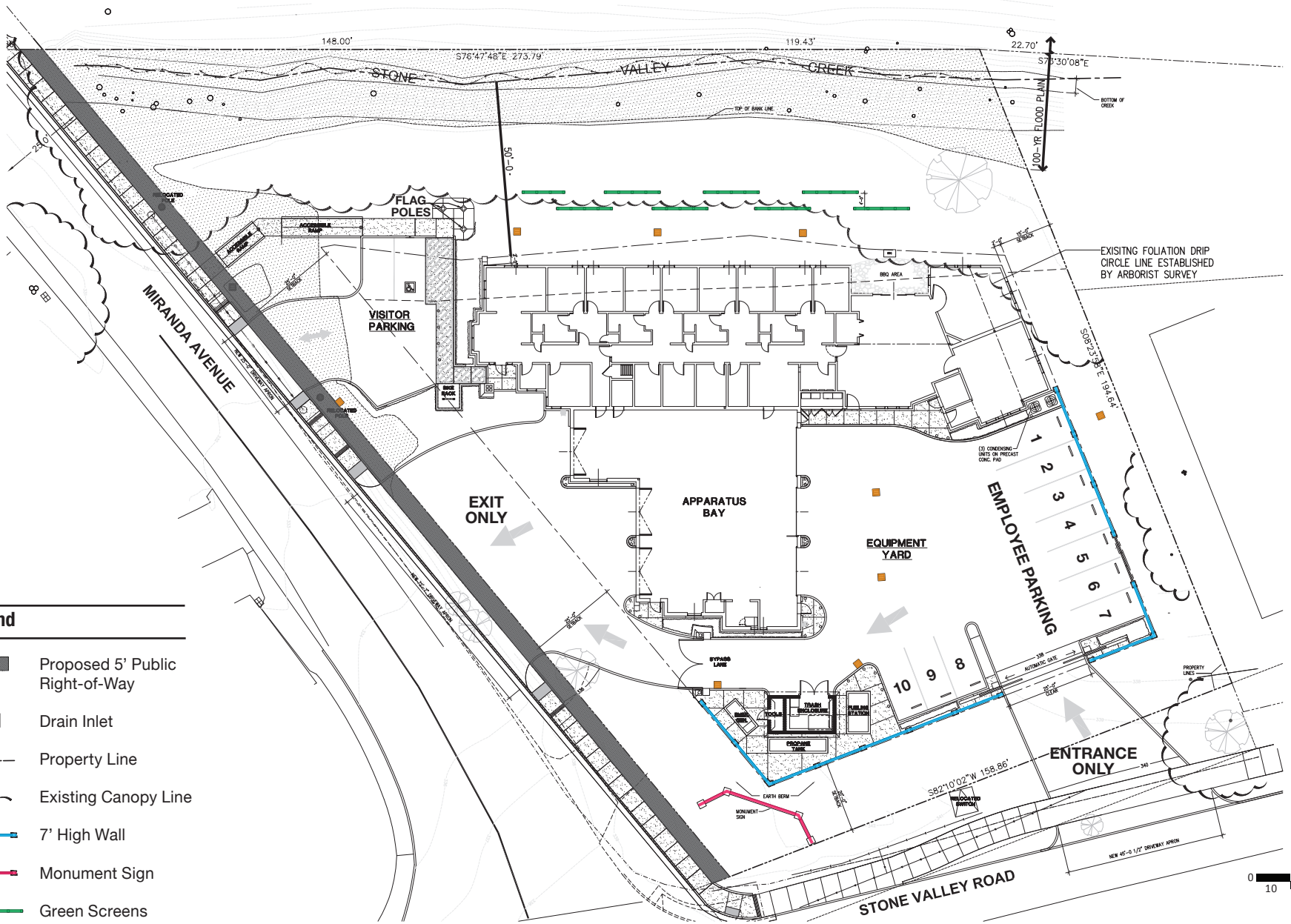
In addition to parking for employees and visitors, the site plan also includes an equipment yard to allow for on-site cleaning and maintenance of the vehicles, as well as a fueling station, propane tank, emergency generator, tool shed, and trash enclosure. **Figure 2** shows the project site plan.

A monument sign identifying the fire station would be constructed at the corner of Stone Valley Road and Miranda Avenue, and the traffic signal at this intersection would be retrofitted to allow for automatic pre-emption by emergency vehicles exiting the station.

Project Location

Figure 1

Source: Google Earth, 2010.



Legend

- Proposed 5' Public Right-of-Way
- Drain Inlet
- Property Line
- Existing Canopy Line
- 7' High Wall
- Monument Sign
- Green Screens

Site Plan

Figure 2

Source: ATI Architects & Engineers, 2010.

A maximum 7-foot-high precast concrete wall covered with stone veneer would be constructed around the equipment yard. The project also includes widening of Miranda Avenue along the eastern side to provide a sidewalk to enhance pedestrian safety. The project seeks approval of a land use permit as required by the provisions of the R-20 Zoning District in which the subject property is located.

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

San Ramon Valley Fire Protection District
1500 Bollinger Canyon Road
San Ramon, CA 94583

***Environmental Impact Analysis**:*

This analysis discusses the direct and indirect environmental effects of the whole of the project, including site preparation and grading, construction of project features, and operational impacts associated with the project. This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) requirements and will assist County decision makers in determining whether the environmental effects from the project would result in potentially significant environmental impacts. Where significant impacts are identified, mitigation measures are provided that would reduce these impacts to a less-than-significant level.

All mitigation measures are incorporated as changes to the project, and the County will include the mitigation measures as conditions of project approval. Because this document finds that the project, inclusive of defined mitigation measures, would have no significant impacts, further environmental review will not be required by CEQA.

***General Plan Designation**:*

Contra Costa County General Plan: Single-Family Residential – Low Density (SL)

***Zoning**:*

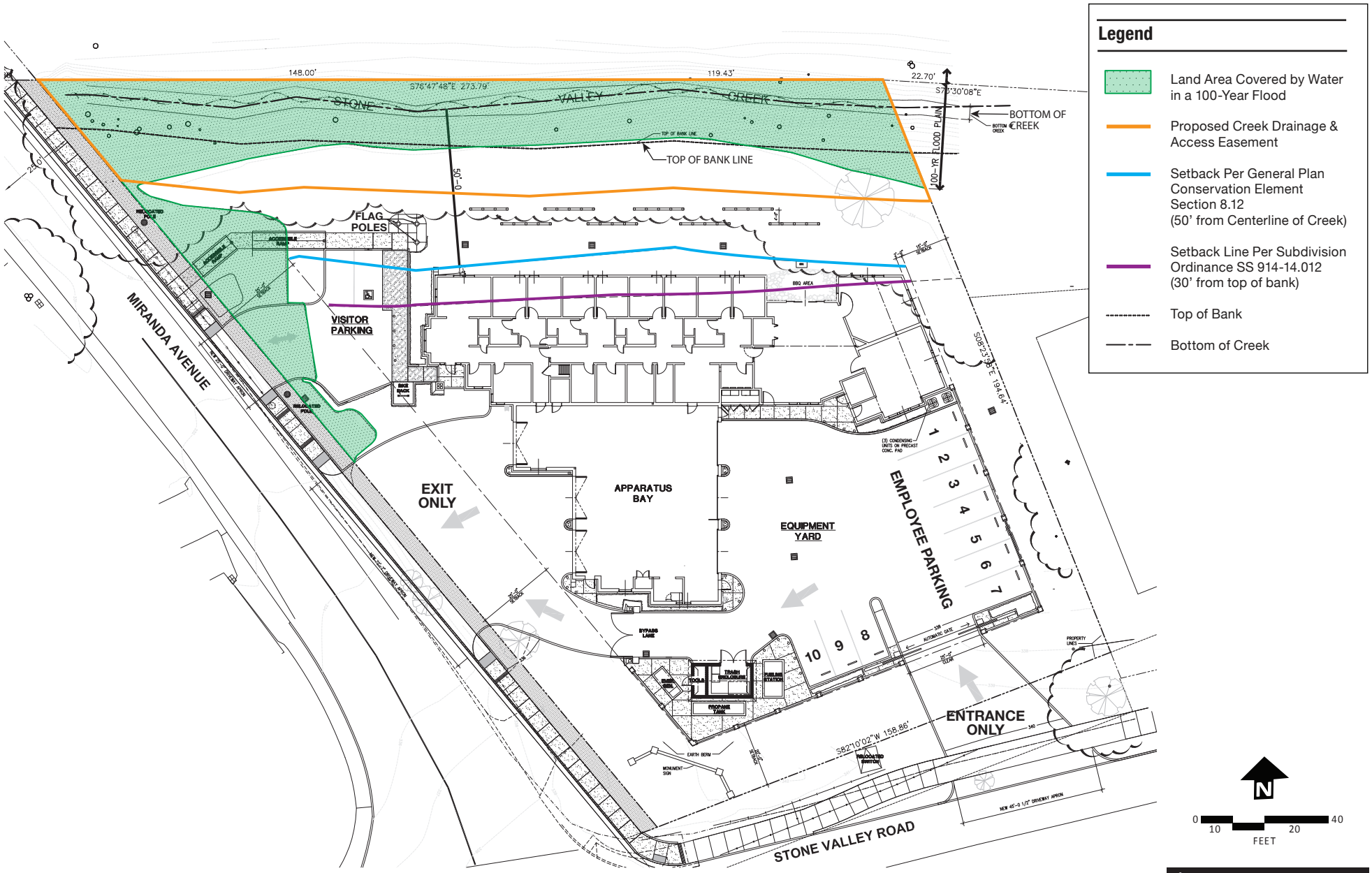
Contra Costa County Zoning: Single-Family Residential (R-20)

***Description of Project**:*

Project Site Characteristics: The site is currently developed with a vacant single-family residence, a detached garage, in-ground pool, and a retaining wall. All structures would be demolished as part of the project. There are 52 trees on the project site including 44 Valley Oaks, the majority of which are in fair or good condition.

Stone Valley Creek runs along the north property line, and portions of the building and site improvements would be located within required creek structure setbacks established by the Contra Costa County Subdivision Ordinance Code §914-14.012. The project requests an exception to this creek structure setback requirement. (The project conforms to the 50-foot setback from centerline of the creek required by the General Plan policy 8.12). **Figure 3** shows the required setbacks from the creek and also shows the 100-year flood zone.

The project is generally surrounded by single-family residential development. Stone Valley Middle School is located approximately 0.4 miles to the north on Miranda Avenue.



Flood Zone and Creek Setbacks

Figure 3

Source: Carlson, Barbee, and Gibson, 2008

Circulation and Parking: The project includes one-way ingress and egress for emergency vehicles. One-way ingress would be provided via a 25-foot-wide driveway on Stone Valley Road; emergency vehicles would egress the site via a 72-foot-wide driveway onto Miranda Avenue. The apparatus bay would provide enclosed parking for four fire suppression vehicles, and 10 employee parking spaces would be provided in the equipment yard. Visitors would access the site via a separate driveway and parking area located along Miranda Avenue.

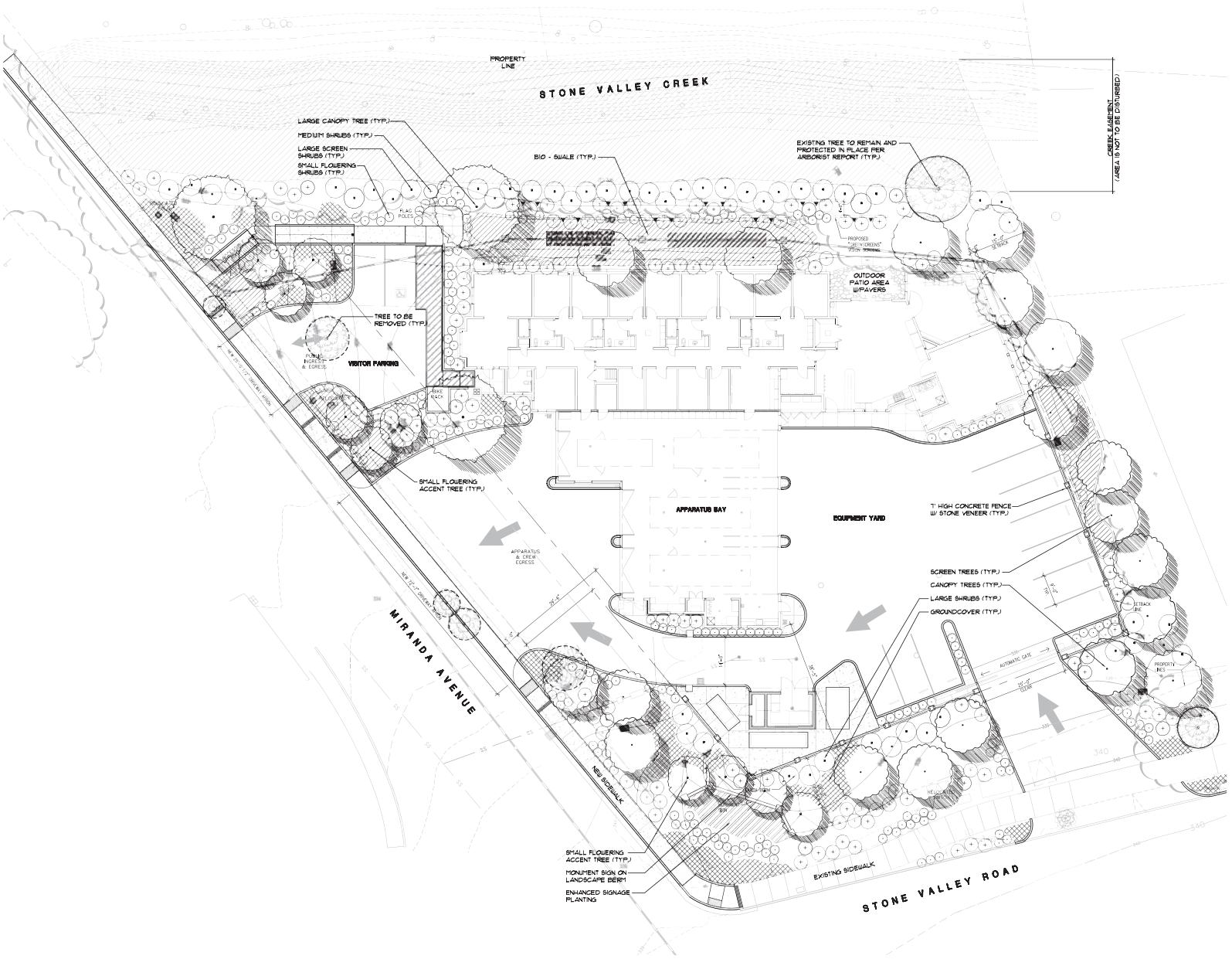
Landscaping: The conceptual landscaping plan is shown in **Figure 4**. The project would add drought tolerant landscaping around the perimeter of the site and adjacent to the station. Five of the site's 52 trees would be removed, including three valley oaks that are actually re-growth from ground level stumps, as well as a queen palm and almond tree that are not suited to relocation or transplanting. The project seeks a tree removal permit for the removal of these five trees and impacts to an additional nine trees. The project would include the planting of approximately 31 new trees. See Appendix A for a list of the proposed plant palette. To provide additional buffering for properties across Stone Valley Creek, the project also includes the construction of five, 8-foot-tall "greenscreen" panels that would be planted with climbing vines.

Grading and Drainage Plan: The site is generally flat, although the existing home is located on an artificially raised pad approximately 10 feet above grade. The site currently slopes to the north towards Stone Valley Creek. Proposed grading would level the site to an elevation of approximately 336 feet above sea level. The project includes approximately 0.58 acres of impervious surface, and would include stormwater treatment facilities such as bio-swales and flow-through planters to accommodate stormwater runoff in compliance with C.3 clean water guidelines.

Utilities and Site Improvements: An existing above ground transformer is located in the public right-of-way along Stone Valley Road, just outside of the project's property line. This transformer would be relocated to the west in order to accommodate the emergency vehicle access driveway. Refer to **Section XVII, Utilities and Service Systems**, for further discussion of potential impacts.

Construction: Construction of the project would begin as early as April 2011 and would be completed over a period of approximately 12 months. Project construction would comply with Contra Costa County's construction noise regulations. Policy 11-8 of Contra Costa County's General Plan limits construction to normal daytime work hours and prohibits construction work during the evening and early morning periods. Furthermore, since the project site is located within 500 feet of residential and commercial uses, project grading shall also comply with Contra Costa County Ordinance Code 716-8.1004 and be limited to weekdays between the hours of 7:30 A.M. and 5:30 P.M.

***Requested Actions*: Table 1** lists the discretionary and ministerial approvals requested for the project. Approval of a land use permit is the discretionary action triggering the need for CEQA review.



Landscape Site Plan

Figure 4

Source: ATI Architects & Engineers, 2010.

Table 1. Project Approvals

Agency/Provider	Permit/Approval
Contra Costa County	Certification of Initial Study/Mitigated Negative
	Land Use Permit
	Exception to County Ordinance Code §914-14.012
	Tree Removal Permit
	Grading Permit
	Building Permit
	Encroachment Permit
California Regional Water Quality Control Board	Section 401 Certificate
	National Pollutant Discharge Elimination Permit
	Stormwater Pollution Prevention Plan

Source: CirclePoint, 2010.

Environmental Factors Potentially Affected

This Initial Study includes an evaluation of impacts based on the CEQA Guidelines Appendix G Environmental Checklist. Each checklist item is explained in the discussion following the checklist and, if necessary, mitigation measures are provided to reduce impacts to a less-than-significant level. In accordance with CEQA, all answers take into account the whole of the action, including on- and off-site effects, direct and indirect effects, and effects from both construction and operation of any new development.

Each checklist criterion is marked to identify whether there is an environmental impact.

- *No Impact* indicates that there is no impact.
- *Less-than-Significant Impact* means that while there is some impact, the impact does not exceed any identified thresholds.
- *Significant Unless Mitigation Incorporated* indicates that a significant impact has been identified in the course of this analysis and mitigation measures have been provided in this Initial Study to reduce a potentially significant impact to a less-than-significant level.
- *Significant Impact* indicates that not all impacts have been reduced to less-than-significant and an Environmental Impact Report (EIR) will be required. As noted previously, mitigation measures developed for this project reduce any significant impacts to a less-than-significant level and an EIR will not be required.
- *Cumulative Impact*s are discussed in **Section XVIII, Mandatory Findings**. The project is considered in combination with approved and proposed projects in the vicinity of the project, as well as the projected buildout of the County as allowed under the County's General Plan to determine if the cumulative impact is significant or less than significant. If a significant cumulative impact is identified, the project's contribution to the significant cumulative impact is considered.

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a significant impact as indicated by the checklist on the following pages. Mitigation measures have been provided for each significant impact, reducing all to a less-than-significant level.

☒ Aesthetics	☐ Agriculture and Forestry Resources
☒ Air Quality	☒ Biological Resources
☒ Cultural Resources	☒ Geology & Soils
☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☒ Hydrology & Water Quality	☐ Land Use & Planning
☐ Mineral Resources	☒ Noise
☐ Population & Housing	☐ Public Services
☐ Recreation	☒ Transportation & Circulation
☒ Utilities & Service Systems	☒ Mandatory Findings of Significance

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Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project COULD have a significant effect on the environment, but mitigations identified in this Initial Study will reduce these impacts to a less than significant level, and a MITIGATED NEGATIVE DECLARATION will be prepared. ☒

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

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

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. ☐

R. Hernandez — June 6, 2011

Ruben Hernandez
Senior Planner

Date

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ENVIRONMENTAL IMPACT CHECKLIST

I. Aesthetics

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Project Setting

The existing visual character of the project site is suburban, and surrounding properties consist of single-family homes with associated landscaping. Stone Valley Creek provides mature riparian vegetation features along the project's northern property line.

Existing lighting in the vicinity of the project site includes interior and exterior lighting from the adjacent residences, street lamps, and headlights from vehicle traffic along Stone Valley Road and Miranda Avenue.

The project site is not designated as a scenic resource. The General Plan designates Alamo Ridge as a scenic ridgeway, although this feature is located more than 1,000 feet to the south and is not visible from the site. The California Department of Transportation (Caltrans) has designated I-680 as a scenic county highway; this resource is located 0.6 miles to the west and is not visible from the site.

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

No Impact. The site is not designated as a scenic resource and no scenic ridgeways or other resources are visible from the site. The project consists of a single story building with a maximum height of 32.5 feet, and would not affect any existing views to or from scenic resources. No mitigation is required.

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

Less-than-Significant Impact. According to Caltrans, I-680 is a designated state scenic highway. The project site is located approximately 0.6 miles east of I-680 and is not visible from the highway. Furthermore, the project would not disturb any designated historic buildings, and there are no rock outcroppings in the vicinity of the project site. Therefore, the impact to scenic resources within a state scenic highway would be less than significant. No mitigation is required.

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

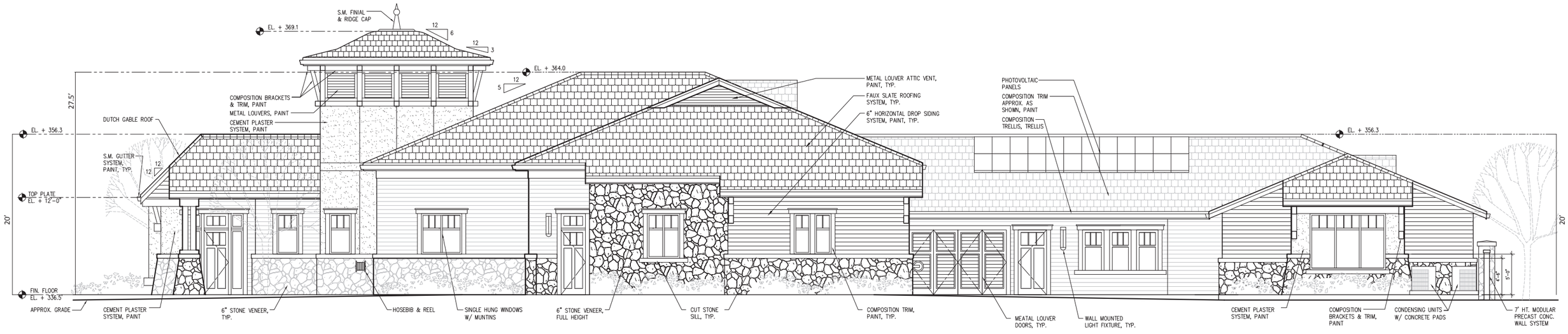
Less-than-Significant Impact. The project site is currently developed with a vacant single family home, a detached garage and a pool. The project includes construction of a single story fire station with a tower feature rising to 32.5 feet in height. **Figure 5** shows architectural elevations for the portions of the building facing Miranda Avenue and Stone Valley Road. **Figure 6** provides visual simulations of what the project would look like from viewpoints along Stone Valley Road and Miranda Avenue.

The proposed architectural style and materials are similar to residential-style architecture, including a roof made of faux slate, and walls that feature a combination of painted horizontal siding and stone veneer. The 7-foot high precast concrete wall around the equipment yard would be covered in stone veneer and would screen the cars in the parking area from adjacent residences and Stone Valley Road. Additionally, the project would include five, 8-foot tall "greenscreen" panels, planted with climbing vines, along the northern side of the building to provide additional landscaping and screening of the building.

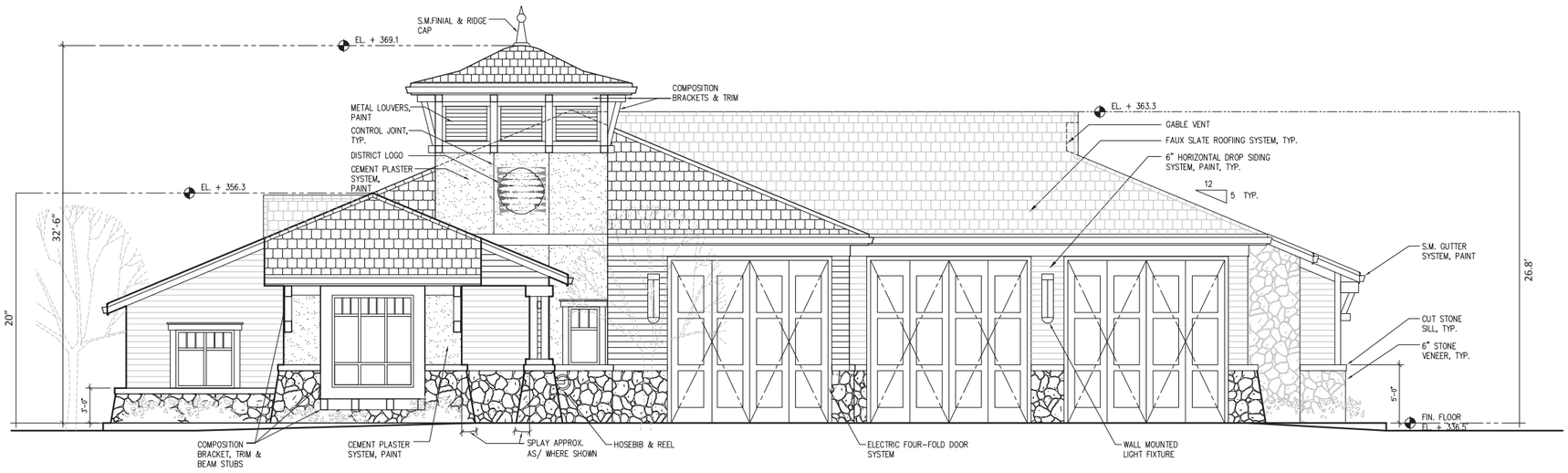
As described above, the project includes design features that provide an appropriate buffer between adjacent residential uses, and the proposed architectural materials approximate those used on surrounding properties. As such, the project would not significantly degrade the existing visual character or aesthetic quality of the project area and its surroundings, representing a less-than-significant impact. No mitigation is required.

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

Significant unless Mitigation Incorporated. The project would introduce new sources of nighttime lighting and daytime glare. New sources of nighttime lighting include exterior building lighting and the downcast of interior lighting through the windows of the fire station. The project would include approximately eight wall-mounted light fixtures on the exterior of the building. As the building would be located in the middle of the project site, it would be at least 15 feet from the adjacent residence to the east and at least 50 feet from the adjacent residences to the north. Additionally, the project site would maintain the existing canopy along the east and northern property lines, and would augment the site with landscaping to provide an additional buffer for adjacent residences. Implementation of **Mitigation Measure I-1** would ensure that lighting would not spillover onto adjacent properties.



VIEW FROM STONE VALLEY ROAD



VIEW FROM MIRANDA AVENUE

0 5 10 20
FEET

Fire Station Elevations **Figure 5**

Source: ATI Architects & Engineers, 2010.

Figure 5: Fire Station Elevations (back)

Existing view along Stone Valley Road

Proposed view along Stone Valley Road

Existing view along Miranda Avenue

Proposed view along Miranda Avenue

NOTE: The foreground in this view has been altered to provide a clear perspective of the frontage of the project site.

Existing & Proposed Perspective Views

Figure 6

Source: ATI Architects & Engineers, 2009.

Mitigation Measure I-1: Prior to submittal of plans to the Building Inspection Division, the San Ramon Valley Fire Protection District shall ensure that building construction plans show exterior lighting and window treatments on the fire station building and associated parking areas that are designed to minimize glare and light spillover to adjacent properties.

The County Department of Conservation and Development (DCD) staff shall ensure that final design plans include light fixtures that are downcasting and low mounted to reduce light trespass onto adjacent properties. The final design plans shall also include glazing window treatments to minimize the intensity of daylight glare produced by the fire station.

Significance after Mitigation: Implementation of window treatments and exterior lighting measures, as identified in **Mitigation Measure I-1**, would reduce potentially significant impacts related to daytime glare and nighttime lighting to a less-than-significant level.

II. Agriculture and Forest Resources

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or with a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Project Setting

According to the California Department of Conservation, the project site and adjacent lands are designated as Urban and Built-up Land and do not contain Prime Farmland, Unique Farmland, or

Farmlands of Statewide Importance.[1] The project site is not under a Williamson Act contract or zoned for any other agricultural use.

In regards to forestry resources, the project site does not contain any forest lands or timberlands nor is it zoned for forest or timberland uses.

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?

No Impact. According to the Contra Costa County Assessor's website, a residential structure was constructed on the project site in 1900. Historical records from 1959 show that the project site was part of a large orchard, although it has not been used for agricultural production since that time.[2]

The project represents infill development within a low-density residential area, and would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

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

No Impact. The project site is not zoned for agricultural use, nor is it under a Williamson Act contract. Furthermore, the project site has not been used for agricultural purposes since 1959. Therefore, the project would not conflict with existing zoning for agricultural use, or with a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project site is not zoned for forest land or timberland use. Therefore, the project would not conflict with existing zoning for forest land, timberland, or timberland production.

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

No Impact. The project site does not contain forest land. Therefore, the project would not result in the loss of forest land or the conversion of forest land to non-forest use.

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[1] Contra Costa County Important Farmland 2008. State of California Department of Conservation, Farmland Mapping and Monitoring Program. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/con08.pdf>. Accessed on September 30, 2010.

[2] Phase 1 Environmental Site Assessment for San Ramon Valley Fire Protection District Fire Station #32 Project. (December 2009). ENGEO Inc.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As described above, the project site does not contain any Farmlands or forest lands and would not result in the conversion of Farmlands or forest lands to other uses.

III. Air Quality

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Project Setting

The project site is located within the San Francisco Air Basin (Basin), which is regulated by the Bay Area Air Quality Management District (BAAQMD). Pursuant to the federal Clean Air Act, the BAAQMD is required to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The Basin is considered a non-attainment area for ground-level ozone and fine particulate matter ($PM_{2.5}$) under both the Federal Clean Air Act (CAA) and the California Clean Air Act.

The Basin is also considered non-attainment for respirable particulate matter (PM_{10}) under the California Clean Air Act. The Basin is considered in attainment for carbon monoxide (CO) under both state and federal ambient air quality standards.

a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?

Less-than-Significant Impact. The *Bay Area 2010 Climate Action Plan (CAP)* was adopted by BAAQMD in September 2010, and is the current regional Clean Air Plan under the federal CAA.

To address the region's non-attainment status for ozone (O_3), the CAP explains how the Air Basin will achieve compliance with the CAAQS for one-hour O_3 and eight-hour $O_{3,}$ and also explains how the region will reduce transport of O_3 and ozone precursors to neighboring air basins. To achieve these state and federal standards, the CAP contains mobile and stationary source controls, transportation control measures, land use and local impact measures, and energy and climate measures to be implemented throughout the region.

The CAP is based on regional population, housing, and employment projections through 2020 compiled by the Association of Bay Area Governments (ABAG). As such, a project would conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the regional growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT).

The proposed project would not result in any foreseeable increase in population or employment in the region since the project does not include any housing that could increase local area or regional growth. The project would not induce a substantial increase in employment opportunities in the County since the project is replacing the existing Fire Station #32 located at 1101 Stone Valley Road, approximately 0.4 miles west of the project site. Moreover, as the project would replace an existing fire station, the project would not result in an entirely new use that could substantially increase vehicle miles traveled relative to existing conditions.

Since the project would not directly increase the population or create a substantial change in the VMT, the project would not conflict with the regional air quality planning for the area. In conclusion, the project would not conflict with or obstruct implementation of the applicable CAP. This is considered a less-than-significant impact and no mitigation is required.

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

Less-than-Significant Impact. In general, long-term air quality emissions related to the project would result from the operation of fire engine vehicles responding to emergencies, employees driving to and from the site, and building operations such as heating and cooling. The existing Fire Station #32 responds to an average of 1.5 calls per day.[3] Additionally, the station operates on 48-hour shifts with six firefighters per shift.

The project would result in daily emissions during the 12-month construction period. The BAAQMD CEQA Guidelines do not contain specific screening criteria for fire stations or similar public/institutional uses. Air quality emissions were estimated for the project using the URBEMIS2007 model (Version 9.2.4) to quantify the construction-period and operational-period air

[3] This number was derived from information published in the SRVFPD's *Standards of Cover*. The SRVFPD collects data on the number of calls per station per year. Because the nature of emergency response trips fluctuates from day to day, the annual number of trips was converted into a daily average. The existing Fire Station #32 received 536 calls for service between July 1, 2008 and June 30, 2009. Therefore, it is assumed that Fire Station #32 responded to about 1.5 calls per day.

quality emissions. The URBEMIS model calculates standard transportation-related emissions. Although the URBEMIS model does not include a selection to evaluate a fire station-type of land use, project emissions were estimated using the "government office building" land use selection. Furthermore, the trip rate was adjusted from the default standard rate of 70 trips per day for government office buildings to approximately 10 trips per day, which is considered a conservative estimate since the fire station responds to approximately 1.5 calls per day and operates on 48-hour shifts with six firefighters per shift. As shown in **Table 2**, the project would not exceed the thresholds for construction-related or operational air quality emissions.

Table 2: Average Daily Project Emissions

	Average Daily ~~Construction~~ Emissions (lb/day)			
	ROG	**NOx**	**PM_{10}**	**$PM_{2.5}$**
BAAQMD CEQA Thresholds*	54	54	82 (exhaust)	82 (exhaust)
Project Construction Emissions	2.2	10.6	0.7 (exhaust)	0.5 (exhaust)
Project Operational Emissions	0.33	0.17	0.15	0.04

Source: CirclePoint, 2010.

*Note: The BAAQMD CEQA thresholds for average daily emissions apply to both construction and operational emissions.

Since the project is replacing the existing Fire Station #32, it would not result in any new vehicle miles traveled relative to existing conditions. As shown in **Table 2**, ~~T~~the project would not violate any air quality standard for construction or operational emissions and would not contribute to an existing air quality violation. Therefore, this impact is considered less than significant and no mitigation is required.

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

Less-than-Significant Impact. As described above, the project's operational air quality emissions would be negligible. As the project would not contribute to the exceedance of any criteria air pollutant violation as established by the BAAQMD, the project would not result in a cumulatively considerable increase in a criteria pollutant. No mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Significant Unless Mitigation Incorporated. Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy long-term air pollutant levels. Construction activities, however, would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to the adjacent single-family residential development.

Construction and grading activities produce combustion emissions from various sources, including heavy equipment engines, asphalt paving, and motor vehicles used by the construction workers. Dust would be generated during site clearing, grading, and construction activities, with most dust

occurring during grading activities. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed, amount of activity, soil conditions and meteorological conditions. Nearby single-family residences could be adversely affected by dust generated during construction activities.

Although grading and construction activities would be temporary, they would have the potential to cause both nuisance and health air quality impacts. Particulate matter (PM_{10}) is the pollutant of greatest concern associated with dust from construction activities, and if uncontrolled, PM_{10} levels downwind of actively disturbed areas could possibly exceed state standards.

According to BAAQMD, when appropriate measures are implemented to reduce fugitive dust, then the residual impact of future development would be considered to be reduced to a less-than-significant level. **Mitigation Measure III-1** would require control measures for dust during project construction.

> **Mitigation Measure III-1:** The BAAQMD CEQA Guidelines construction control measures listed below shall be implemented during project construction:
>
> - Water all active construction areas at least twice daily.
> - Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
> - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
> - Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
> - Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
> - Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
> - Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
> - Limit traffic speeds on unpaved roads to 15 mph.
> - Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
> - Replant vegetation in disturbed areas as quickly as possible.
> - Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.

- Install windbreaks, or plant trees/vegetative windbreaks at the windward side(s) of construction areas.
- Suspend excavation and grading activity when sustained winds exceed 25 mph.
- Limit the area subject to excavation, grading, and other construction activity at any one time.

Significance after Mitigation: **Mitigation Measure III-1** includes all feasible measures for construction emissions identified by the BAAQMD that are relevant to the project. According to BAAQMD guidelines, implementation of all of the measures described above would reduce construction impacts of the project to a less-than-significant level.

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

Significant Unless Mitigation Incorporated. The project would not generate objectionable odors during the operational period. During construction and grading, diesel powered vehicles and equipment used on the site could create localized odors. These odors would be temporary and would dissipate in the outdoor construction environment; however, the idling of diesel engines for an extended period of time could be considered an impact to the adjacent residences.

> **Mitigation Measure III-2:** The construction plans shall clearly indicate the following requirements for all vehicles: Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to three minutes. Clear signage shall be provided for construction workers at all access points.

Significance after Mitigation: Implementation of **Mitigation Measure III-2** would ensure that exhaust emissions are reduced to the maximum extent feasible. Implementation of this measure would reduce impacts from emissions generated by idling during construction to a less-than-significant level.

IV. Biological Resources

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse impact 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?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, Regional, or state habitat Conservation plan?	☐	☐	☐	☒

Project Setting

Information in this section was drawn from a Biological Evaluation Report prepared by Pacific Biology in October 2010 and a tree survey conducted by Timothy C. Ghirardelli Consulting Arborist Services in September 2009. The Biological Evaluation Report is included as **Appendix B**. The tree survey is found in **Appendix C** of this Initial Study.

With the exception of the Stone Valley Creek corridor, the project site is generally undeveloped and is characterized by low-growing non-native grasses and ruderal (i.e., weedy) plant species interspersed with areas of bare soil. The herbaceous plant species present are characteristic of disturbed areas and include ripgut brome (*Bromus diandrus*), wild oat (*Avena* sp.), filaree (*Erodium botrys*), bristly ox-tongue (*Picris echioides*), and Italian thistle (*Carduus pycnocephalus*). It appears that the undeveloped areas are managed to reduce excessive vegetation growth.

Within the Stone Valley Creek corridor, understory vegetation is relatively sparse and includes poison oak (*Toxicodendron diversilobum*), and non-native species such as English ivy (*Hedera helix*), Himalayan blackberry (*Rubus discolor*), and Italian thistle. The tree canopy is moderately dense and is dominated by valley oak (*Quercus lobata*), but also contains non-native tree species such as plum (*Prunus* sp.) and cypress (*Cupressus* sp.).

The 2009 tree survey identified the trees present on the project site, their health, and potential effects to the trees from construction of the proposed project. The tree survey identified at total of 52 trees on the project site, including 44 valley oaks, the majority of which are in fair or good condition. Within the construction zone, five trees, including three small valley oaks, a non-native palm tree, and a non-native almond tree are proposed for removal. A relatively large valley oak (diameter 25 inches) is located in the northeastern portion of the project site and is not proposed for removal.

Figure 7 shows the location of special-status plant and wildlife species that have been documented by the CNDDB in the surrounding project area. The potential occurrence of these and other special-status species on the project site is discussed below.

Special-Status Wildlife Species

Potentially Occurring Federally Listed Species

California red-legged frog (*Rana draytonii*) is a federally threatened species and a California Species of Special Concern. The species occurs from sea level to elevations of 1,500 meters (5,200 feet). Breeding occurs in streams, deep pools, backwaters within streams and creeks, ponds, marshes, sag ponds, dune ponds, lagoons, and stock ponds. Breeding adults are often associated with deep (greater than 0.7 meter [2 feet]) still or slow moving water and dense, shrubby riparian or emergent vegetation, but frogs have been observed in shallow sections of streams and ponds that are devoid of vegetative cover. The species also utilizes non-aquatic habitats for refuge and dispersal. The species is known to rest and feed in riparian vegetation and it is believed that the moisture and cover of the riparian zone provides foraging habitat and facilitates dispersal. The species has also been documented dispersing through areas with sparse vegetative cover and dispersal patterns are considered to be dependent on habitat availability and environmental conditions.

As shown in **Figure 7**, California red-legged frog has been documented in several tributaries of San Ramon Creek, with the closest documented occurrence of the species being approximately 1.5 miles to the north of the project site. While California red-legged frog has not been documented in Stone Valley Creek, the creek has a hydrologic connection to San Ramon Creek and the nearby tributaries where California red-legged frog has been documented.

Special-Status Wildlife Species in Project Vicinity

Figure 7

Source: Pacific Biology, 2010

Cooper's hawk *(Accipiter cooperii)* is included on the Special Animals List maintained by the California Department of Fish and Game (CDFG) and on this basis could be considered to be of special-status under CEQA. This species was previously a California Species of Special Concern, but its sensitivity status has been downgraded to being a "Watch List" species. Breeding pairs generally select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. Although the Cooper's hawk has not been documented in the project area, the trees on and near the project site provide potential nesting habitat for this bird species.

Western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. This turtle primarily inhabits aquatic habitats, including ponds, slow moving streams, lakes, marshes, and canals. The species frequently basks on logs or other objects out of the water. Western pond turtles also require upland oviposition (i.e., egg laying) sites in the vicinity (typically within 200 meters, but as far as 400 meters) of the aquatic site. Mating typically occurs in late April or early May and most oviposition occurs during May and June, although some individuals may deposit eggs as early as late April and as late as early August. As shown in **Figure 7**, western pond turtle has been documented approximately 3 miles to the northeast of the project site. The onsite creek zone provides marginal habitat for western pond turtle because of the absence of large pools, sunny basking areas, and upland oviposition sites. However, there is a low potential that the species could occur in the project area and temporarily occur in the onsite creek zone.

Special-status bat species, such as pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevilli*), and hoary bat (*Lasiurus cinereus*) could roost in the onsite riparian zone. Additionally, the onsite house has not been occupied in approximately one-year and bats could utilize any openings in the structure for roosting. As shown in **Figure 7**, the pallid bat has been documented along San Ramon Creek (approximately 1-mile from the project site).

Special-Status Plant Species

The Pacific Biology site visit was conducted outside of the blooming period of most plant species and it was not possible to identify all potential plant species that might be present. Therefore, the site visit focused on evaluating the suitability of the onsite habitats to support special-status plant species occurring in the project region.

The project site appears to be regularly mowed and is in a disturbed condition. The plant species present within the construction area are characteristic of disturbed and urban habitats and include only weedy and other non-native species (see **Appendix B**). The construction area is lacking in unique substrates, (e.g., alkaline or serpentine soils) micro-habitats (e.g., volcanic rock outcrops, vernal pools, wetlands, etc.), and is entirely surrounded by residential development. For these reasons, no special-status plant species are expected to occur in the construction area. The riparian zone in the northern portion of the project site would not be directly disturbed by construction activities, although it is also in a disturbed condition that does not provide habitat characteristics associated with special-status plant species.

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

Significant unless Mitigation Incorporated. **Figure 7** shows the location of special-status wildlife species that have been documented by the CNDDB in the surrounding project area. The potential occurrence of these and other special-status species on the project site is discussed below.

Special-Status Wildlife Species

Potentially Occurring Federally Listed Species

California Red-Legged Frog. The portion of Stone Valley Creek on and bordering the project site provides potential habitat for California red-legged frog, but there are several factors that detract from the quality of the habitat for the species. These detrimental factors include the fact that the creek is perennial and likely supports predatory fish species, as well as the fact that the creek banks are very steep, and are directly bordered by residential development, limiting the existence of upland habitat. Therefore, the creek zone would not be expected to support breeding by the species due to the creek's narrow width and steep banks that lead to high water flows during the winter breeding period while the species requires still or very slow moving water. However, given the known occurrence of California red-legged frogs within approximately 1.5 miles, and that the project site has a hydrologic connection to this and other tributaries where California red-legged frog have been documented, it is possible that individual non-breeding red-legged frogs could occur in the onsite creek zone.

The project would not include any direct impacts to Stone Valley Creek or other aquatic habitat potentially used by California red-legged frog. The proposed project also does not include the disturbance of riparian vegetation that provides potential refuge habitat. Additionally, the proposed project includes project design features that would prevent project-related decreases to water quality in Stone Valley Creek (see **Section IX, Hydrology and Water Quality)**. Therefore, the proposed project would not adversely affect habitat potentially used by California red-legged frog.

There is a low potential that individual frogs could move into the construction zone and be harmed. Frogs would be most likely to disperse from the riparian zone during or immediately following rain events. Therefore, while the potential for California red-legged frog to occur in the construction zone is considered low, given the rarity of the species, any loss or harm to the species may be considered a significant impact.

The implementation of **Mitigation Measures IV-1** through **IV-4** would reduce potential impacts to California red-legged frog to a less-than-significant level.

> **Mitigation Measure IV-1:** Prior to the commencement of construction activities, temporary exclusion fencing shall be installed between the construction zone and the top of bank of Stone Valley Creek. The fencing shall be made of a fine-meshed material that does not allow the species to pass or to become entangled in the fencing. The bottom of the fencing shall be buried to a minimum depth of two inches such that animals do not pass under the fencing.

Mitigation Measure IV-2: A qualified biologist shall survey the project site for California red-legged frog (and other sensitive wildlife species) immediately preceding the commencement of construction activities. If California red-legged frogs are found, the biologist shall contact the USFWS and the project shall be halted until the USFWS provides guidance on how to proceed. If other wildlife species are observed, they may be moved from the construction area to the riparian zone by biologists in possession of a valid scientific collecting permit.

Mitigation Measure IV-3: A California red-legged frog sensitivity training shall be conducted for all onsite construction personnel. Training components shall include training on appropriate avoidance methods including species identification, daily preconstruction surveys, and protocols for contacting the biologist and USFWS in the event of a sighting. The training shall also address the importance of staying out of the riparian zone. Handouts shall be prepared and provided to all construction personnel including color photographs for species identification, protocols, and contact phone numbers.

Mitigation Measure IV-4: During project construction activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

Cooper's Hawk. The project would not include the removal of trees potentially used for nesting by Cooper's hawk. However, loud noise associated with construction activities have the potential to disturb nesting occurring in close proximity to the project site and to result in the abandonment of an active nest. The loss of an active nest of a special-status bird species may be considered a significant impact.

It should also be noted that the active nests of most common bird species are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. While active nests of common bird species are not considered to be of special-status under CEQA, these nests are protected by state and federal law.

The implementation of **Mitigation Measure IV-5** would reduce potential impacts to Cooper's hawk to a less-than-significant level. The measure would also serve to protect the active nests of other bird species and to ensure compliance with state and federal laws protecting active bird nests.

Mitigation Measure IV-5: If construction activities would commence anytime during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), a pre-construction survey for nesting birds shall be conducted within one week of the commencement of construction activities.

The survey area shall include the project site and accessible/visible areas within 500 feet of the site. If active nests are found in areas that could be directly affected, or in areas that would be subject to prolonged construction-related noise, a no-disturbance buffer zone should be created around the nest during the breeding season, or until a qualified biologist determines that all young have fledged, or that

the proposed activity would not affect the nesting success. The size of the buffer zone and types of activities restricted within them shall be determined through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the project site at the time of the survey and the noise and disturbance levels expected during construction activities;
- Distance and amount of vegetation or other screening between areas where construction activities would occur and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Western Pond Turtle. The project would not include any direct impacts to the Stone Valley Creek or other aquatic habitat potentially used by western pond turtle. However, if western pond turtle is present in the creek, there would be a low potential that individual turtles could move into the construction zone and be harmed. Therefore, potential impacts to western pond turtle may be considered potentially significant.

The temporary exclusionary fencing (**Mitigation Measure IV-1**) and the preconstruction clearance survey for California red-legged frog (**Mitigation Measure IV-2**) would also serve to ensure that western pond turtle would not be harmed. The implementation of these measures would reduce potential impacts to western pond turtle to a less-than-significant level.

Special-Status Bats. The project would not include the removal of any trees within the riparian zone or of adequate size to be used as a maternity roost for special-status bats. However, it is possible that the house to be demolished could be used as a maternity roost. Therefore, potential impacts to roosting special-status bats are considered potentially significant.

The implementation of **Mitigation Measure IV-6** would reduce potential impacts to special-status bat species to a less than significant level.

> **Mitigation Measure IV-6:** A focused survey shall be conducted by a qualified bat biologist to determine if an active bat roost of a special-status species is present in the onsite house. The survey shall be conducted during the breeding season of native bat species in California (generally from April 1 through August 31). Should an active maternity roost of a special-status bat species be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the structure may be demolished. If a roost of non-breeding bats is identified, then the bats shall be passively excluded using CDFG-approved methods. Additionally, if an active maternity roost is identified, or if a roost of non-breeding bats is identified, then replacement roosting habitat shall be provided, such as bat boxes. The replacement roosting habitat to be provided shall be species appropriate and subject to the approval of the CDFG.

Significance after Mitigation. Implementation of **Mitigation Measures IV-1** through **IV-4** would reduce potential impacts to California red-legged frog and would ensure that the California red-legged frog would not be impacted during project construction or operation. **Mitigation Measures**

IV-1 and **IV-2** would also ensure that the western pond turtle would not be impacted during project construction. **Mitigation Measure IV-5** would protect the Cooper's hawk and the active nests of other bird species on the project site. **Mitigation Measure IV-6** would ensure that the existing house on the project site would be inspected for active bat roosts prior to demolition. These mitigation measures would reduce impacts to special-status wildlife species to a less-than-significant level.

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

Significant unless Mitigation Incorporated. Stone Valley Creek and its associated riparian vegetation are expected to be under the jurisdiction of the CDFG, and the creek channel (up to the ordinary high water mark) is expected to be under the jurisdiction of the ACOE.

The CDFG generally has jurisdiction over these resources, together with other aquatic features that provide an existing fish and wildlife resource pursuant to Sections 1602-1603 of the California Fish and Game Code. The CDFG asserts jurisdiction to the outer edge of vegetation associated with a riparian corridor.

No work is proposed within the riparian zone. The implementation of **Mitigation Measure IV-1** includes the installation of exclusionary fencing between the construction area and the riparian zone. This measure would serve the dual purpose of preventing the incidental disturbance of riparian habitat during construction activities.

Additionally, the project would not adversely affect water quality within Stone Valley Creek (see **Section IX, Hydrology and Water Quality**). Therefore, no direct or indirect impacts to riparian habitats are expected to occur on the project site.

c) Have a substantial adverse impact 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?

No Impact. As a developed site, there are no federally protected wetlands defined by Section 404 of the Clean Water Act on the project site. Therefore, the project would not result in any impacts to federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Significant unless Mitigation Incorporated. Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or manmade obstacles such as urbanization. Stone Valley Creek is a tributary to San Ramon Creek and provides a potential movement route to and from open space areas located to the east of Alamo. In the project area, residential development borders Stone Valley Creek and wildlife moving within the creek zone would be subject to related disturbances, such as nighttime lighting, noise, and pets. However, Stone Valley Creek is still considered to be part of a potential wildlife movement corridor.

No work is proposed within the riparian zone and the proposed project would not create a barrier to wildlife movement within Stone Valley Creek. However, if uncontrolled, project-related lighting could spill into the riparian zone. Depending on the magnitude of the light spillage (given the extent of existing lighting near the creek), wildlife could be deterred from moving within the creek zone.

> **Mitigation Measure IV-7:** The final lighting plan shall demonstrate that the project-related spillover of light does not substantially increase light levels within the adjacent creek zone over current levels. This may be accomplished through features such as downcasting, motion detectors, or other appropriate methods.

Significance after Mitigation: Implementation of **Mitigation Measure IV-7** would ensure that light spillover would not affect wildlife movement within the creek corridor and would reduce the impact to a less-than-significant level.

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

Significant unless Mitigation Incorporated. The project consistency with policies and ordinances pertaining to creek setback and tree removal are discussed below.

Creek Setback

The proposed project would be subject to the several policies and ordinances related to setbacks from the creek including the Contra Costa County General Plan and the Subdivision Ordinance.

Policy 8-89 from the Contra Costa County General Plan states:

> *Setback areas shall be provided along natural creeks and streams in areas planned for urbanization. The setback areas shall be a width adequate to allow maintenance and prevent damage to adjacent structures, the natural channel, and associated riparian vegetation. The setback area shall be a minimum of 100 feet; 50 feet on each side of the centerline of the creek.*

The station would be constructed at a distance greater than 50 feet from the centerline of Stone Valley Creek, although several project features would extend into this setback:

- the northern edge of the visitors' parking lot would extend to a point approximately 28-feet from the creek's centerline (but completely outside of the riparian zone).
- the paving around the flagpoles is approximately 20-feet from the creek's centerline.
- five, 8-foot tall "greenscreen" panels would be constructed within the setback area.

Based on the analysis and creek setback recommendations provided by ENGEO (see **Section VI, Geology and Soils**), the proposed setbacks will avoid impacts to the structure related to potential creek bank erosion. Additionally, the primary intent of the required General Plan setback is to provide a width adequate to allow maintenance and prevent damage to adjacent structures, the natural channel and associated riparian vegetation. The parking area within the General Plan setback area would not be expected to create a conflict between any required maintenance activities and protection of the creek and riparian vegetation because maintenance equipment could be staged and operated from the parking area. The "greenscreen" panels also would not be expected

to conflict with required maintenance activities. However, as the project includes the construction of structures within 50 feet of the creek's centerline, the project would conflict with General Plan Policy 8-89.

Subdivision Ordinance 914-14.012 specifies required setbacks of structures from unimproved earth channels. Based on the characteristics of the creek banks this ordinance would require a setback of approximately 50 feet from the top of the creek bank. No permanent structures of any kind other than drainage structures may be constructed within the subdivision ordinance setback area, but fencing and landscaping are excluded from this restriction. The "greenscreen" panels would be constructed within the subdivision ordinance setback area; however, these panels are similar to fencing, which is a use permitted within the setback area. The visitors' parking area would extend approximately 22 feet into the subdivision ordinance setback area and the dormitory portion of the main building would extend approximately 11 feet into the subdivision ordinance setback area. An exception to the subdivision ordinance setback requirements is being requested as part of the project.

Subdivision Ordinance 914-14-006 (Open Channel-Minimum Widths of Easements) specifies the minimum width of easements required adjacent to open channels. Based on the channel top width a 15-foot easement is required. The project includes the dedication of a 15-foot easement adjacent to the south bank of Stone Valley Creek and no structures or other project features are proposed within this area. Therefore, the project would be consistent with the requirements of Subdivision Ordinance 914-14-006.

Tree Removal

Of the 52 trees present, five are proposed for removal, including three small valley oaks, one non-native palm tree, and one non-native almond tree.

The three valley oaks to be removed are small (3-6 inches in diameter) and according to the arborist report "all exhibit regrowth from stumps where primary structure has been removed. The resulting secondary growth is weakly attached and will become increasingly more prone to failure as the trees age and develop." The arborist report concludes that these trees have no salvage value and are not suited to transplant or relocation due to existing structural and site limits. From a biological perspective, the removal of these three trees is not considered substantial for the following reasons:

(1) the small size of the trees;

(2) the roadside location of the trees;

(3) the trees are not part of a woodland or forest; and

(4) the abundance of larger and healthier valley oak trees in the area.

The proposed project also includes the removal of a non-native palm tree (6 inch diameter) and a multi-trunked almond tree. Because these trees are non-native, small, and are planted in front of an existing residence, they also have very limited wildlife value.

While the proposed removal of the five trees is not considered substantial from a biological perspective, compliance with the County's tree protection ordinances would be required. The trees to be removed are not considered "heritage trees" under the Heritage Tree Preservation Ordinance (Chapter 816-4 of the Contra Costa County Ordinance Code), but they are considered "protected

trees" by the Tree Protection and Preservation Ordinance (Chapter 816-6 of the Contra Costa County Ordinance Code). The project is requesting approval of a tree removal permit for these trees.

Nine trees were identified within the construction area that would be retained, but due to their location, could be subject to incidental damage during construction activities. Based on the arborist report, these nine trees would "undergo minor and sustainable impacts," assuming the implementation of the arborist's recommended Tree and Root Zone Protection Guidelines.

> **Mitigation Measure IV-8:** The Tree and Root Zone Protection Guidelines specified in the arborist report prepared for the project by Timothy C. Ghirardelli Consulting Arborist Services (September 2009) and found in **Appendix C** shall be implemented during construction.

Significance after Mitigation: Implementation of **Mitigation Measure IV-8** would ensure that the trees proposed for removal on the project site would be done so in accordance with County standards and would reduce impact to a less-than-significant level.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, Regional, or state habitat Conservation plan?

No Impact. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), whose closest boundary is located more than 3 miles east of the project site across a highly urbanized area. Therefore, the project would not impact or conflict with an HCP.

V. Cultural Resources

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archeological resource, pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource, site, or unique geologic features?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Project Setting

A California Historical Resources Information System (CHRIS) records search was performed for the project site on October 4, 2010 and is provided in **Appendix D**. The records search did not find evidence of any recorded cultural resources on the project site or surrounding areas. Although no local, state, or federal inventories include recorded buildings or structures within the proposed project area, one recorded property, the Site of the Former Akibzi and Minnie Stone Home (Property #009980), is located within approximately 50 yards to the east of the project site. This site is listed as a Landmark of the San Ramon Valley and is also listed in the Office of Historic Preservation's Historic Properties Directory with a status code of 7R which means it was identified in a reconnaissance level survey but not evaluated.

No Native American resources have been recorded on the project site or in the surrounding area, but Native American resources in this part of Contra Costa County have been found in areas adjacent to intermittent and perennial watercourses, and therefore there is a moderate potential of identifying unrecorded Native American resources in the project area.

A Sacred Lands File and Native American Contacts List Request was filed with the Native American Heritage Commission (NAHC) given the moderate potential for Native American resources in the project area. The records search performed by the NAHC did not indicate the presence of Native American cultural resources. The NAHC provided a list of Native American individuals and tribal organizations to contact for information regarding any known and recorded Native American resources or sites in the project area. The County also sent tribal consultation letters to all

individuals and tribal organizations listed in an effort to obtain additional archival information. To date, no responses have been received and no additional archival information on cultural resources in the project area is available at this time.

A Historical Resource Evaluation (HRE) was prepared for the project in November 2010 and is provided in **Appendix D**. The 2100 Stone Valley Road property was evaluated to determine if it was eligible for listing in the California Register of Historical Resources individually or as a contributor to a historic district. The HRE indicated that the house at 2100 Stone Valley Road was constructed prior to 1947 and is not associated with any significant events or persons in the history of Alamo or Contra Costa County and the building is not a significant resource. Additionally, the project is not located in a potential historic district. Therefore, the building is not individually eligible for listing on the California Register and is not a historical resource as defined under CEQA.

In regards to paleontological resources, neither the County's General Plan Archaeological Sensitivity Map (Figure 9-2) nor the CHRIS records search identify any paleontological resources, sites or unique geologic features in the project area. To identify any known paleontological resources in the vicinity of the project site, a record search was conducted on November 2, 2010, of the online database maintained by the University of California Museum of Paleontology (UCMP).[4] According to the UCMP online locality search tool, no records of known fossil localities exist on the project site. The closest recorded paleontological sites are located approximately 3 miles northwest of the project site.

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

Less-than-Significant Impact. According to the HRE, the structures on the project site are not located in a potential historic district and are not individually eligible for listing on the California Register. The project site does not qualify as a historical resource as defined in the CEQA Guidelines Section 15064.5. Therefore, historical resources would not be impacted by the proposed project, representing a less-than-significant impact. No mitigation is required.

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

Significant Unless Mitigation Incorporated. Although there are no identified archaeological resources on the project site and the project site has previously been graded and developed, excavation and construction of the project could potentially uncover unknown or unrecorded archaeological artifacts. Excavation and soil disturbance during construction could damage or destroy these resources without the incorporation of mitigation measures. **Mitigation Measure V-1** would reduce any impacts to less-than-significant level.

[4] On-line fossil locality search, University of California Museum of Paleontology, (November 2, 2010). Accessed at http://ucmpdb.berkeley.edu/loc.shtml.

Mitigation Measure V-1: In the event that buried archaeological resources are encountered, the Contra Costa County Department of Conservation and Development (DCD) shall ensure that construction, excavation, and/or grading activities within 100 feet of the find are temporarily halted until a qualified archaeologist, hired by the applicant, can assess the significance of the find and provide proper management recommendations to be incorporated into the project. Prehistoric cultural materials include, but are not limited to, shell midden deposits, hearth remains, stone and/or shell artifacts, and/or burials. Historic materials, including but not limited to, whole or fragmentary ceramic, glass or metal objects, wood, nails, brick, or other materials may occur on the project site in deposits such as old privies or dumps. If the site is found to contain significant archaeological resources (as determined by the CEQA Guidelines) by a qualified archaeologist, funding shall be provided by the applicant to identify, record, report, evaluate, and recover the resources as necessary. Construction within the area of the find shall not recommence until impacts to the archaeological resource are mitigated. Additionally, as required by Public Resources Code Section 5097.993, the project applicant must inform project personnel that collection of any Native American artifact is prohibited by law.

Significance after Mitigation: The implementation of **Mitigation Measure V-1** would reduce potential project impacts to archaeological resources to a less-than-significant level.

c) Directly or indirectly destroy a unique paleontological resource, site, or unique geologic features?

Significant Unless Mitigation Incorporated. While no recorded paleontological resources have been identified in the project area, there is potential to encounter unknown paleontological resources on the project site during grading and construction. **Mitigation Measure V-2** would address potential impacts to unknown paleontological resources.

Mitigation Measure V-2: In the event that buried paleontological resources are encountered during project grading, site preparation, and/or construction; construction and/or grading activities within 100 feet of the find shall be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations. Paleontological resources include, but are not limited to, fossils and material remains.

Significance after Mitigation: The implementation of **Mitigation Measure V-2** would reduce potential project impacts to paleontological resources to a less-than-significant level.

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

Significant Unless Mitigation Incorporated. The CHRIS records search found a moderate likelihood for Native American archaeological resources, which would include buried human remains within the project area. Should human remains of Native American origin be discovered on the project site during grading and/or construction, it would be necessary to comply with regulations governing the disposition of Native American remains, set forth by the State of California and administered by the NAHC (Public Resources Code Section 5097). **Mitigation Measures V-3** and **V-4** address the impacts related to the potential discovery of human remains on the project site.

Mitigation Measure V-3: If human remains are encountered during ground-disturbing activities within the project area, the County Health Services Department shall require that work within 25 feet of the discovery shall be stopped and the project contractor shall immediately notify the Contra Costa County Coroner. At the same time, a qualified archaeologist meeting federal criteria under 36 CFR 61 shall be contacted by the County Health Services Department to assess the situation and consult with the appropriate agencies. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

Upon completion of the assessment, the qualified archaeologist shall prepare a report documenting the background to the finds, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the County Department of Conservation and Development, County Health Services Department, and the Northwest Information Center. Once the report is reviewed and approved by the agencies identified above, and any appropriate treatment completed, project construction activity within the area of the find may resume.

Mitigation Measure V-4: Prior to the issuance of grading permits, the County Department of Conservation and Development shall require that the County Health Services Department and project contractor provide documentation that all construction crews that will work on the project have undergone a training session to inform them of the presence and nature of federal or state-eligible cultural resources and the potential for previously undiscovered archaeological resources and human remains within the project area, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work.

Significance after Mitigation: The implementation of **Mitigation Measure V-3** and **Mitigation Measure V-4** would reduce the project's potential impacts to any human remains discovered on the project site to a less-than-significant level.

VI. Geology and Soils

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslide?	☐	☐	☐	☒
b) Would the project result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in table 18-1b of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Project Setting

Information in this section was drawn from a Geotechnical Exploration prepared by ENGEO Incorporated in December 2009. This Geotechnical report is included as **Appendix E**.

The project site is located on the east side of San Francisco Bay in the Coast Ranges geomorphic region of California. The project site is underlain by undivided quaternary deposits. There are Pliocene age Green Valley/Tassajara Formations south of Stone Valley Road, which typically consist of poorly cemented sandstone, siltstone and claystone.

The Calaveras fault is located approximately 2.5 miles southwest of the project site and the Concord/Green Valley Fault zone is located approximately 4 miles northwest of the project site.

a.i) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact. No known active or potentially active faults cross the project site. The closest known active fault is the Calaveras fault approximately 2.5 miles southwest of the site. The project site is not located within the Alquist-Priolo Earthquake Fault Zone of the Calaveras Fault. Because no active faults cross the project site, the project would not expose people or buildings to known risks of fault rupture. Impacts related to seismic shaking are discussed below under item (a.ii).

a.ii) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving strong seismic ground shaking?

Significant Unless Mitigation Incorporated. In the event of a major earthquake generated within the San Francisco Bay Region, the project site would experience strong to violent ground shaking.

The project would be required to comply with the provisions of the 2007 California Building Code (CBC). When built according to CBC standards, structures are anticipated to perform as follows:

(1) resist minor earthquakes without damage;

(2) resist moderate earthquakes without structural damage but with some nonstructural damage; and

(3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Conformance to the current building code standards would reduce some of the ground shaking hazard. Implementation of **Mitigation Measure VI-1** would minimize geologic related impacts to a less-than-significant level by requiring a specific type of cement to be used in the foundation concrete of the station and also requiring the approval of a geotechnical report prior to construction.

> **Mitigation Measure VI-1**: Prior to the issuance of a building permit, the County Geologist shall ensure that the seismic safety recommendations of the report found in **Appendix E** are included in the construction plans. As described in **Appendix E**, type II cement shall be used in the foundation concrete for structures on the project site. Concrete shall incorporate a maximum water cement ratio of 0.5 and a

minimum compressive strength of 3,000 pounds per square inch (psi). Structural engineering design requirements for concrete may result in more stringent concrete specifications.

Significance after Mitigation: By ensuring that seismic safety recommendations are incorporated into the construction plans, **Mitigation Measure VI-1** would reduce the potential exposure of people or structures to adverse impacts resulting from seismic-related ground shaking to a less-than-significant level.

a.iii) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. According to soil testing, the overall risk of liquefaction is low because soils on the project site are clayey underlain by shallow bedrock. This is considered a less-than-significant impact. No mitigation is required.

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

No Impact. According to the United States Geological Survey (USGS), the project site is not located in an area with a high potential for landslides.[5] Therefore, no impact would occur as a result of the project.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Significant Unless Mitigation Incorporated. The project site is located adjacent to the Stone Valley Creek, and the existing creek banks have the potential to be unstable and susceptible to lateral erosion in their natural condition. As described in the Project Description and in **Figure 3**, the proposed building is set back at least 50 feet from the centerline of the creek. According to the geotechnical report found in **Appendix E**, this setback distance is adequate to protect creek bank stability. **Mitigation Measure VI-2** would require the County Geologist to review and approve the final building plans prior to the issuance to building permits to ensure that an acceptable setback from the creek would be maintained.

> **Mitigation Measure VI-2:** Prior to the issuance of building permits, the County Geologist shall ensure that building plans maintain a minimum 50-foot setback from the centerline of the creek.

Significance after Mitigation: Implementation of **Mitigation Measure VI-2** would ensure that the building footprint is setback from the creek at an acceptable distance in order to prevent creek erosion.

[5] U.S. Geologic Survey. San Francisco Bay Region Landslide Information. Available at http://pubs.usgs.gov/of/1997/of97-745/cc-df.pdf. Accessed on October 5, 2010.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less-than-Significant Impact. As discussed under item (a), implementation of the project would not pose potential risks from seismically-induced liquefaction and would not pose potential risks from landslides on- or off-site. Therefore, impacts related to soil stability as a result of the project would be less-than-significant. No mitigation is required.

d) Be located on expansive soil, as defined in table 18-1b of the Uniform Building Code (1994), creating substantial risks to life or property?

Significant Unless Mitigation Incorporated. Soil borings performed on the project site indicate that some of the soils have a high to very high expansion potential. Expansive soils shrink and swell as a result of moisture change, and if unmitigated these soils could cause damage to structures and pavements through heaving and cracking of slabs, pavements, and structures which are built on shallow foundations. **Mitigation Measure VI-3** would require the project applicant to follow the recommendations provided in the Geotechnical Report prepared for the project and found in **Appendix E**. The Geotechnical Report includes recommendations regarding the treatment of expansive soils and construction measures for the project foundation, concrete slabs, and pavement.

> **Mitigation Measure VI-3**: Prior to the issuance of a building permit, the County Geologist shall review the plans for consistency with the geotechnical recommendations found in the Geotechnical Report (ENGEO, 2009) to ensure that the construction recommendations for expansive soils contained in the project specific geotechnical report are included in construction plans and designs.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The project does not propose the use of septic tanks. The station would be connected to existing wastewater mains, and the Central Contra Costa Sanitary District (CCCSD) would treat the wastewater generated by the project. No impact would occur.

VII. Greenhouse Gas Emissions

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Project Setting

Regulatory Setting

Global climate change, the warming of the earth's temperature, is caused by the emission of GHGs into the atmosphere. Naturally occurring GHGs include the following:

- carbon dioxide (CO_2), commonly emitted through the burning of fossil fuel;
- methane (CH_4), typically emitted through agriculture (animal waste) and the out-gassing of landfills; and
- nitrous oxide (N_2O), emitted through the burning of fossil fuel and agricultural soil management.[6]
- Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are primarily products of specialized industrial activities.

Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), and halons are stratospheric ozone depleting substances. Other fluorine containing substances, including hydroflurocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6), do not deplete stratospheric ozone, but they are considered powerful GHGs. When these gases are released into the atmosphere, they block heat and energy from being radiated back into space, and deflect this energy back to the earth's surface in what is known as the greenhouse effect.

[6] California Health and Safety Code, Section 38505. (January 2009); California Assembly Bill 32, California Global Warming Solutions Act of 2006. (2006); CEQA Guidelines, Section 15364.5.

Although the greenhouse effect is a naturally occurring process, the release of GHGs through human activities is increasing the amount of heat and energy deflected back to the earth, and therefore increasing the earth's overall temperature to abnormally high levels.

According to the California Air Resources Board (CARB), California is the 15th largest emitter of GHGs in the world, producing 484 million gross metric tons of CO_2 equivalent, totaling about two percent of worldwide GHG emissions between 2002 and 2004. The transportation sector in California is the greatest contributor to GHG emissions, representing 38 percent of average emissions between 2002 and 2004. Following the transportation sector, the energy sector represents 23 percent, the industrial sector represents 20 percent, and the commercial and residential sector represents 9 percent of GHG emissions during this same time period.

Assembly Bill (AB 32) codified California's goal of reducing statewide emissions of greenhouse gases to 1990 levels by 2020. This reduction is proposed to be accomplished through an enforceable statewide cap on global warming emissions that will be phased in starting in 2012 to achieve maximum technologically feasible and cost-effective GHG emissions reductions. Pursuant to AB 32, CEQA now requires quantitative assessment of GHG emissions directly or indirectly caused by a project.

Methodology

As the precise causal link between an individual project's emissions and global climate change has not yet been developed, it is generally accepted that an individual development project cannot, by itself, generate sufficient GHG emissions to independently affect global climate change. The combination of individual projects can, however, *cumulatively* impact global climate change, especially when a project is taken in combination with all other past, present, and reasonably foreseeable future projects.

The CO_2 equivalent (CO_2e) is a figure that enables all GHG emissions to be considered as a group despite their varying global warming potential.

The BAAQMD regulates emissions from both "stationary" and "non-stationary" sources. BAAQMD defines a "stationary source" as a fixed, non-mobile producer of pollution, usually an industrial or commercial facility, while "non-stationary sources" are those that involve vehicular traffic in their operations.

On June 2, 2010, BAAQMD adopted GHG emission thresholds as part of their updated CEQA Guidelines. These thresholds apply to the operation period of projects and do not apply to construction-period emissions. [7] For stationary sources, BAAQMD adopted the threshold of 10,000 metric tons CO_2e per year. The BAAQMD adopted two types of non-stationary operational-related GHG emission thresholds:

(1) a total project emission threshold of 1,100 metric tons of CO_2e per year, or

[7] The BAAQMD may adopt construction-period thresholds at a future date.

(2) an efficiency threshold of 4.6 metric tons CO_2e per service population (employees) per year.

This analysis evaluates the project using the threshold for total project emissions: 1,100 CO_2e per year.

To provide a conservative analysis, this initial study considers the GHG emissions associated with the development of the 9,400-square-foot station, and does not include any credit for the existing 3,700-square-foot facility. The current standard of analysis utilizes both the URBEMIS2007 model (Version 9.2.4) and BAAQMD GHG Model to quantify the construction-period and operational-period GHG emissions. The URBEMIS Model calculates standard transportation-related emissions. The BAAQMD GHG Model incorporates those outputs and also considers GHG emissions associated with area sources, electricity and natural gas, the energy required to convey water and wastewater, and the energy required to haul and dispose of the project's solid waste. The URBEMIS2007 and BAAQMD GHG Model outputs are included in **Appendix F**.

Contra Costa County adopted a Municipal Climate Action Plan (CAP) in December 2008 that provides measures to reduce GHG emissions in municipal buildings in accordance with AB 32. Measures discussed in the County CAP to reduce GHG emissions include using energy efficient and renewable energy sources, waste reduction/recycling, and green building techniques. The County has not established a specific threshold for determining the level of significance of GHG emissions for a public/semi-public project.

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

Less-than-Significant Impact. Both construction period and operational period project activities have the potential to generate greenhouse gas (GHG) emissions.

Construction Impacts

The project would generate GHG emissions during temporary (short term) construction activities from various sources, such as site grading, construction equipment engines, on-site heavy duty construction vehicles, vehicles hauling materials to and from the project site, asphalt paving, and motor vehicles used by the construction workers. On-site construction activities would vary depending on the level of construction activity. Based on the URBEMIS2007 model for the project, it is estimated that temporary construction emissions would be approximately 146 metric tons of CO_2e for the entire 12-month construction phase. The construction-related GHG emissions would be localized and temporary. As previously stated, there are no established thresholds for construction-period GHG emissions. The construction control measures identified in **Mitigation Measure III-1** in **Section III, Air Quality** of the Draft IS/MND would minimize construction-related GHG emissions.

Operational Impacts

Long-term, operational GHG emissions would result from area and mobile sources, as well as indirect emissions from power stations and substations, water conveyance, wastewater generation, and the disposal of solid waste. Specifically, operational GHG emissions would result from project generated vehicular traffic, on-site combustion of natural gas, operation of landscaping equipment, use of consumer products, off-site generation of electrical power over the life of the project, the energy required to convey water to and wastewater from the project site, and the emissions associated with the hauling and disposal of solid waste from the project site.

Based on the URBEMIS2007 and BAAQMD GHG Model, operation of the project would result in a total of 139 metric tons of CO_2e per year. As a conservative approach, the calculation assumes the proposed 9,400 square foot fire station is entirely new and does not consider current GHG emissions generated by the existing Fire Station #32. This level of emission is well below the BAAQMD threshold of 1,100 metric tons CO_2e per year and the project would have a less-than-significant impact.

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

Less-than-Significant Impact. As discussed above, the operational GHG emissions are within the BAAQMD adopted GHG emission threshold of 1,100 metric tons CO_2e per year. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases.

As previously stated, the intent of the County Municipal CAP is to reduce the GHG emissions associated with County municipal operations to meet the reduction targets established by AB 32. Specifically, the County set a reduction target of 50 percent below baseline levels by 2030 to be achieved through the use of energy efficient and renewable energy sources, utilizing waste reduction/recycling, hybridizing the County vehicle fleet, offering employees incentives for green transportation, and applying green building techniques. Since the GHG emissions associated with the project would be under the threshold that was adopted to maintain conformity with the reduction targets set by AB 32, the project would not interfere with the County's intent of meeting the AB 32 target for municipal operations. Thus, the project would not conflict with applicable plans and policies adopted to reduce GHG emissions and the project would have a less-than-significant impact. No additional mitigation is required.

VIII. Hazards and Hazardous Materials

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No 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?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Project Setting

Information in this section was drawn from a Phase I Environmental Site Assessment (Phase I ESA) prepared by ENGEO Incorporated in December 2009. The Phase I ESA was conducted in general accordance with American Society for Testing and Materials (ASTM) standards to determine conditions on the site related to the presence of hazardous materials. ASTM standards include a records search; interviews with owners, operators and occupants; review of historical aerial photography and topographic maps; and a site reconnaissance. The Phase I ESA is included as **Appendix G**.

North Tower Environmental also surveyed the project site for asbestos-containing material (ACM). North Tower Environmental prepared a report including the survey methodology and a summary of results which is included as **Appendix G**.

Site Reconnaissance

ENGEO conducted a site reconnaissance on the project site in October 2009. The site reconnaissance found remnant well equipment and transformers. The well was destroyed by a licensed driller in October 2009. The transformers are located in the south and the west of the project site; these appeared to be in good condition and did not show evidence of staining or leaking.

Historic Hazardous Materials Usage

According to a review of historical records, the project site was historically cultivated as an orchard. To determine if remnant concentrations of agricultural chemicals still exist on the project site, ENGEO collected four soil samples from the project site. The soil samples contained trace amounts of two pesticides: dieldrin and dichlordiphenyldichlorethylene (DDE). Concentrations of each of these pesticides were below their respective regulatory screening levels, and no further action is required.

Records Search Results

The Phase I ESA included a records search of federal, tribal, state, and local regulatory databases pertaining to hazardous material use and releases on and near the project site. The Contra Costa Environmental Health Department Hazardous Materials Division has a record of a 200-gallon underground heating oil tank located on the project site. The heating oil tank was removed from the project site in August 1993. No staining, discoloration, odors, or groundwater was observed during the tank removal. A soil sample from the tank area contained trace amounts of motor oil. The

excavation was backfilled with clean fill and excavation spoils. The site was recommended for closure by the Contra Costa County Environmental Health Division. No additional records on the project site were identified, but seven uses and/or releases were identified within a one-mile radius.

Contra Costa County General Plan Policies Related to Hazardous Materials

10-61: Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated.

10-62: Storage of hazardous materials and wastes shall be strictly regulated.

10-63: Secondary containment and periodic examination shall be required for all storage of toxic materials.

Country Costa County Certified Unified Program Agency (CUPA)

The Hazardous Materials Business Plan Program requires every business within Contra Costa County that handles specific quantities of hazardous materials to submit a hazardous materials business plan (HMBP) to CUPA.[8] In the event of a hazardous materials incident on site, the HMBP gives emergency responders the necessary information to prepare adequate emergency response plans. Hazardous materials inventories on site are reported to fire departments in Contra Costa County.

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

Significant unless Mitigation Incorporated. The project would involve the use of potentially hazardous materials such as pesticides for landscaping, propane tank for refilling the generator, and a fueling station for the emergency vehicles. As pesticides would not be stored on the project site, they would not create a significant hazard to the public or environment.

The fueling station would be a diesel Aboveground Storage Tank (AST) that would be located south of the equipment yard, and would be used to store fuel for the fire engines. **Mitigation Measure VIII-1** would ensure that the routine use of the fueling station would not create a significant hazard to the public or environment.

The propane tank would also be an AST that would be located south of the equipment yard and used to fuel the emergency generator. The generator would only be used in the event of a power outage, but the propane tank would require periodic refilling. **Mitigation Measure VIII-2** would ensure that the propane tank would be refilled properly as to not create a significant hazard to the public or the environment.

Mitigation Measure VIII-1: Prior to the issuance of building permits, the Hazardous Materials Program of Contra Costa Health Services shall review and approve the

[8] The Hazardous Material Program of Contra Costa Health Services (CCHS) is responsible for implementation and enforcement of many hazardous material programs in the county under the CUPA Program (California Health and Safety Code Chapter 6.11).

Aboveground Storage Tank (AST) Spill Prevention Control and Countermeasure (SPCC) plan prepared by the project applicant in accordance with California Health and Safety Code Chapter 6.67.

Mitigation Measure VIII-2: Prior to the issuance of building permits, the project applicant shall prepare a Hazardous Materials Business Plan and submit it to the Hazardous Materials Program of Contra Costa Health Services. The Hazardous Materials Business Plan shall describe proper handling, storage, and disposal techniques in compliance with applicable federal, state, county, regulations including the Department of Toxic Substances Control (DTSC) regulations pertaining to hazardous waste. The hazardous waste plan shall be prepared pursuant to CUPA guidelines.

Significance after Mitigation: Implementation of **Mitigation Measures VII-1** and **VII-2** would ensure that any potentially hazardous materials on the project site would be handled properly and would reduce the impact to a less-than-significant level.

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?

Significant unless Mitigation Incorporated. The project site was analyzed for arsenic, pesticides, and asbestos, as described below.

Arsenic and Pesticides

The Phase I ESA tested soil samples for arsenic and organochlorine pesticides. The analysis did not detect any arsenic in the soil. However, the Phase I ESA confirmed that low concentrations of pesticides (dieldrin and DDE) on the project site are well below the federal hazardous waste criteria and do not pose a significant hazard to the public or the environment. Therefore, this impact is considered less than significant. No mitigation is required.

Asbestos

According to North Tower Environmental, trace amounts (less than one percent) of asbestos-containing materials (ACM) were found in the walls and ceilings of the existing residence on the project site. The demolition of the residence could expose construction workers to asbestos-containing materials.

Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The Bay Area Air Quality District (BAAQMD) is vested with authority to regulate airborne pollutants through both inspection and law enforcement, and must be notified 10 days in advance of any proposed demolition or abatement work. The U.S. Occupational Safety and Health Administration (OSHA) requires that asbestos be handled by properly certified professionals. Implementation of **Mitigation Measure VIII-3** would ensure that the existing residence is properly demolished and would not expose asbestos to onsite construction workers.

Mitigation Measure VIII-3: The project applicant shall ensure that OSHA regulations and measures designed to protect workers (i.e., training, respiratory protection, personal protective equipment) are implemented during the demolition and removal of the sheetrock wall and ceiling systems within the residence.

Significance after Mitigation: Implementation of **Mitigation Measure VIII-3** would reduce the risk of exposing people to hazards associated with regulated building materials by ensuring that materials are removed in accordance with state regulations during demolition. This would reduce the potential hazardous material risk to a less-than-significant level.

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

Less-than-Significant Impact. There are no schools within 0.25-mile of the project site. The Stone Valley Middle School is located approximately 0.4-miles north of the project site at 3001 Miranda Avenue. The project would therefore not emit or handle hazardous materials within 0.25-mile of a school and this impact is considered less than significant. No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?

Less-than-Significant Impact. The project site is not located on a site that is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and therefore the project would not create a significant hazard to the public or environment.

A search of the regulatory databases identified seven sites associated with hazardous materials within a one-mile radius. However, based on a review of the findings from the regulatory databases, the distances to the identified database sites, and regional topographic gradient, it is unlikely that the sites pose an environmental risk to the project site. Additionally, no documented soil or groundwater contamination associated with abutting properties was found on the records search. Therefore the project would not create a significant hazard to the public or the environment and the impact is considered less than significant. No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

and

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are no private airstrips in the project vicinity. The closest public use airport, Buchanan Field, is located in the City of Concord approximately 9.5 miles north. The project would therefore not generate a safety hazard for residents or workers within the project area.

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

No Impact. The County has not adopted an emergency response plan for the Alamo area, and thus the project would not impair implementation of or physically interfere with such a plan.

Additionally, the project is designed to comply with County and fire district standards for roadways and emergency vehicle access and compliance would be verified by both agencies prior to and after construction.

Similarly, the project would not impair implementation of or physically interfere with an emergency evacuation system. The Emergency Alert System and Emergency Digital Information Service are the primary systems used to inform the public of emergencies and threats to health, safety, and welfare. These systems are electronic and are operated by government agencies in conjunction with television and radio stations. In the event of an emergency, these systems are used to broadcast emergency information, such as evacuation alerts, across all radio and television stations in the affected area. Due to the electronic nature of these systems, there is no possibility that they could be impacted by the project.

h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less-than-Significant Impact. Government Code 51175-89 directs the California Department of Forestry and Fire Protection to map areas of very high fire hazards within Local Responsibility Areas (LRA). Mapping of these areas is based on hazard-relevant factors such as fuels, terrain, and weather. The mapped areas are used by the California Building Commission, Contra Costa County Fire Protection District, and the City Building Department to develop codes that determine the appropriate fire resistance of building materials.

According to the 2007 Contra Costa County Fire Hazard Severity Zones in Local Responsibility Area map, the project site is located in an LRA Unzoned area.[9] Unzoned areas are not considered a fire risk and the project would therefore not introduce individuals or structures to an area at risk of wildland fires. Notably, the project is a fire station that is specifically qualified to address wildfire hazards. Additionally, new construction would be required to comply with local Building and Fire Code requirements intended to minimize potential risk to people and structures from fire. The impact would be less than significant and no mitigation is required.

[9] California Department of Forest and Fire Protection, Fire and Resource Assessment Program. Contra Costa County Fire Hazard Severity Zones in LRA. Accessed September 30, 2010. <http://frap.cdf.ca.gov/webdata/maps/contra_costa/fhszl06_1_map.7.pdf>.

IX. Hydrology and Water Quality

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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?	☐	☐	☐	☒
c) Substantially alter the existing drainage patterns of the site or area including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	☐	☒	☐	☐
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 run-off?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
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?	☐	☐	☒	☐

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☒	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Project Setting

Stormwater runoff generated on the project site currently flows to the north, and drains naturally into Stone Valley Creek.

Information in this section was drawn from the Stormwater Control Plan (SWCP) prepared by ATI Architects & Engineers in December 2009. The SWCP is included as **Appendix H**. Flooding information in this section is from the Stone Valley Creek Hydraulic Analysis prepared by Gossett Civil Engineering and included as **Appendix H**.

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

and

f) Otherwise substantially degrade water quality?

Significant unless Mitigation Incorporated. Provision C.3 of Contra Costa County's Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) requires all projects creating and/or redeveloping at least 10,000 square feet of impervious surface to incorporate stormwater management (treatment) facilities. Projects creating and/or redeveloping 1 acre or more of impervious surface are required by Provision C.3 to implement hydrograph modification management plan (HMP) flow-control requirements (estimated to not exceed pre-project rates and durations).

The project proposes 0.58 acres of impervious surfaces, which is more than 10,000 square feet but less than 1-acre. Therefore, the project is required to incorporate stormwater management (treatment) facilities, but is not required to implement hydrograph modification management facilities.

As shown in **Figure 8**, the project site is divided into seven drainage areas, and also includes four bio-retention areas that include swales that provide natural storm water management (treatment) of stormwater. With the exception of drainage area P3, runoff from each of the drainage areas would flow to an on-site treatment area as shown in **Table 3**.

Legend

- **Undisturbed Areas** N1
- **Bio-Retention Basins** B1, B2, B3, B4
- **Landscape Areas** L1, L2, L3
- **Impervious Areas** R1, R2, R3
- P1, P2, P4
- P3

SUMMARY OF TREATMENT AREAS:

B1: P1

B2: R2 AND P2

B3: R1

B4: R3 AND P4

Note: P3 flows to oil water separator and to stormdrain

N

0 10 20 40

FEET

Stormwater Control Plan

Figure 8

Source: ATI Architects & Engineers, 2010.

Table 3: Drainage Areas and Treatment Areas

Drainage Management Area	Description	Treatment Area	Type
R1	Northern portion of fire station roof	B3	Flow Through Bio-Swale
R2	Southwest portion of the fire station	B2	Flow Through Bio-Swale
R3	Southeast portion of the fire station	B4	Flow Through Bio-Swale
P1	Visitors' Parking Lot	B1	Flow Through Bio-Swale
P2	Apparatus and crew egress	B2	Flow Through Bio-Swale
P3	Truck wash and fueling area	Special Treatment Area	Sand oil separator

Source: ATI Architects & Engineers, 2009.

Drainage area P3 includes the truck washing and fueling area, which requires special treatment. Runoff from this area would flow through an inlet to a valve controlled by flow quantities. Low flows (i.e., water from truck washing activities) would flow into a sanitary sewer through a sand oil separator. Higher flows (i.e., a heavy storm event) would flow directly into the storm drain system.

All other areas on the project site (N1, L1, L2, and L3 on **Figure 8**) would be pervious and are considered self-treating. The San Ramon Valley Fire Protection District has prepared a Stormwater Control Plan which has been deemed preliminarily complete by Contra Costa County. **Mitigation Measures IX-1** would ensure that the proposed stormwater management design will be fully documented in the Final Stormwater Control Plan, which would be subject to review and approval by the County. The County would ensure that all stormwater control design features are incorporated into the final project plans in order to minimize impacts to water quality in compliance with C.3 guidelines.

The project would create some potential new sources of stormwater pollutants including wash water or other liquids, fertilizers, and pesticides. **Mitigation Measure IX-1** would require the Final Stormwater Control Plan to include permanent and operational Best Management Practices (BMPs) which would reduce pollutant impacts from on-site sources.

> **Mitigation Measure IX-1:** The San Ramon Valley Fire Protection District shall document the ~~proposed~~ stormwater management design in the Final Stormwater Control Plan, which will be developed in conjunction with construction documents. In addition to the ~~treatment~~ stormwater management facilities that treat stormwater runoff to remove pollutants (permanent post-construction BMPs), the Final Stormwater Control Plan will document source control measures (~~such~~ BMPs for vehicle and equipment cleaning, as well as ~~practices for reducing~~ to minimize the discharge of other stormwater pollutants) ~~to~~ that will be incorporated into the ~~final~~ project design to minimize impacts to water quality. The San Ramon Valley Fire Protection District will also develop a Stormwater Control Operation and Maintenance Plan, which shall document the procedures for the operation and maintenance ~~maintaining~~ of the stormwater management facilities. The Final Stormwater Control Plan and the Stormwater Control Operation and Maintenance

Plan shall be approved by Contra Costa County to~~. The County shall~~ ensure that the ~~approved Final Stormwater Control Plan is incorporated into the final~~ project ~~design to~~ minimizes impacts to water quality in accordance with the requirements of the County's National Pollutant Discharge Elimination System Permit. Implementation of source control measures, as well as operation and ~~M~~maintenance of the stormwater management facilities shall be the responsibility of the San Ramon Valley Fire Protection District for the life of the project.

Significance after Mitigation: Implementation of **Mitigation Measures IX-1** would ensure that the stormwater management design would be fully documented in the Final Stormwater Control Plan, and would include additional source control BMPs which would reduce impacts from storm water pollutants. **Mitigation Measures IX-1** would therefore reduce impacts to water quality standards to a less-than-significant level.

b) Deplete groundwater?

No Impact. The project does not include any plan to withdraw groundwater. The East Bay Municipal Utility District (EBMUD) would provide domestic water to the project site, and does not use groundwater as a municipal water supply. Thus, groundwater quality and overall infiltration are not expected to be affected by project development and there would be no impact to groundwater. No mitigation is required.

c) Substantially alter the existing drainage patterns of the site or area including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?

and

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

Significant unless Mitigation Incorporated. Although the project would include grading and site improvements, it would not substantially alter the existing drainage patterns of the site that flow into Stone Valley Creek. Stormwater runoff would be retained onsite to provide natural treatment and to improve off site flow during storm events such that incidents of flooding would be reduced.

The project includes a total of 2,468 square feet of stormwater treatment area, while C.3 guidelines would require only 792 square feet based on the amount of impervious surface proposed by the project. Therefore, the project would provide substantially more on-site treatment than is required and would reduce the amount of flooding associated with storm events.

Implementation of **Mitigation Measure IX-1** would require the project applicant to prepare and comply with a Final Stormwater Control Plan, ensuring that existing drainage patterns would not be substantially altered.

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 run-off?

Less-than-Significant Impact. The Central Contra Costa Sanitary District storm drains would have adequate capacity to serve the project site (see **Section XVII, Utilities and Service Systems**). Furthermore, as discussed under subheading (a), the project contains 4 bio-retention areas that

would decrease the rate and volume of stormwater runoff discharged from the project site. Therefore, this impact is considered less than significant. No mitigation is required.

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?

and

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

Less-than-Significant Impact. According to the hydraulic analysis found in **Appendix H**, review of the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM) indicates that the northern portion of the project site along Stone Valley Creek, including portions of the visitors' parking lot, is designated as "Zone AE", a Special Flood Hazard Area (SFHA) that is within the 100-year storm event flood area (see **Figure 3**). ~~The 100-year flood event area is at an elevation of 333.5 feet. The finished floor elevation of the fire station building and the trash enclosure will be 335.6 feet. Therefore, n~~No structures would be placed within the 100-year flood hazard area which would impede or redirect flood flows. The impact is considered less than significant. No mitigation is required.

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

Less-than-Significant Impact. No portion of the fire station structure will be located within the identified 100-year flood zone. The closest dams to the project site are the Pine Creek Dam, located approximately 3 miles to the northeast, and the Danville Dam, located approximately 3 miles to the south. The distance of the project site from the dams minimizes the likelihood of any adverse effects associated with dam failure. Therefore, impacts related to exposure of people or structures to flooding as a result of dam failure would be less than significant. No mitigation is required.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. A tsunami is a large tidal wave generated by an earthquake, landslide, or volcanic eruption. Large earthquakes occurring in the Pacific Ocean can generate seismic waves, such as tsunamis. The project site is located at an elevation of 259 feet above mean sea level,[10] and is approximately 28 miles east of the Pacific Ocean and approximately 16 miles east of San Francisco Bay. The site is not adjacent to any hillsides or large bodies of water. Therefore, there is no risk related to tsunami, seiche, or mudslides.

[10] USGS, Geographic Names Information System (GNIS), 2010.

X. Land Use and Planning

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Project Setting

The Alamo community is characterized by low density residential land uses. The project site is immediately bordered by Stone Valley Creek to the north, single-family residential units to the east, Stone Valley Road to the south, and Miranda Avenue to the west. The wider project area along Stone Valley Road and Miranda Avenue contains low-density single family homes.

Under the Contra Costa County General Plan, the project site is designated as Single-Family Residential – Low Density (SL). The site is zoned Single-Family Residential (R-20).

a) Physically divide an established community?

Less-than-Significant Impact. The single-family residence on the project site is currently vacant and development of the site would not divide an established community.

The project represents infill development as the site is surrounded by low density residential development. The project would not introduce any changes to access for any adjacent properties and would not disrupt or divide the existing fabric of the community. As a fire station, the project would enhance emergency services in the project area. No mitigation is required.

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?

Less-than-Significant Impact. As part of the project description the Fire District is requesting approval of an exception to the creek structure setback requirements of the County Subdivision

Ordinance as well as a tree removal permit for impacts to protected trees on the site. The purpose of the County Subdivision Ordinance is to protect structures from damages that may be caused by creek erosion and the purpose of the Tree Protection and Preservation Ordinance is to protect trees on private property while allowing for reasonable enjoyment of private property rights and property development. Prior to approving the project, the Contra Costa County Planning Commission would be required to make findings to allow and approve the creek structure setback exception and tree protection ordinance tree removal permit. No mitigation is required.

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

No Impact. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), whose closest boundary is located more than 3 miles east of the project site across a highly urbanized area. Therefore, the project would not impact or conflict with an HCP.

XI. Mineral Resources

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Project Setting

According to the Contra Costa County General Plan, there are no significant mineral resources within Alamo.[11] The project site is outside of any areas of known mineral importance or history of mining.

a) Result in the loss of availability of a known mineral resource?

and

b) Result in the loss of availability of a locally important mineral resource recovery site?

No Impact. As there are no significant mineral resources located within Alamo, the project site would have no impact on mineral resources.

[11] Contra Costa County General Plan, 2005-2020. Conservation Element. Figure 8-4, page 8-34.

XII. Noise

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in 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 the other agencies?	☐	☐	☒	☐
b) Result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Project Setting

Information in this section was drawn from a Noise Analysis prepared by Rosen, Goldberg, Der & Lewitz, Inc. in October 2010. The Noise Analysis is included as **Appendix I** of this initial study.

Fundamentals of Noise

Noise can be described as any unwanted or objectionable sound. Noise is typically generated by transportation, specific land uses, and on-going human activity. The effect of noise on individuals and communities varies with the duration of the noise source, its intensity and frequency, and the

tolerance level of those exposed to the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was devised to relate noise to human sensitivity since it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The human ear can detect changes in sound levels of approximately 3 dBA under normal, controlled conditions. A change of 5 dBA is noticeable to most people in an exterior environment.

Although dBA is used to measure sound frequencies that the human ear is most sensitive to, this is not an effective way to measure noise levels within a community, since community noise is always fluctuating and changing. Several noise rating units exist to analyze adverse effects of noise on a community. These metrics include the community noise equivalent level (CNEL) and the day-night noise level (Ldn). CNEL is an average of all noise levels recorded over a 24-hour period. Ldn is an average that is similar to CNEL, but it also includes a 10 dBA penalty for nighttime noise that occurs between 10 P.M. and 7 A.M.

County noise standards are specified in the Noise Element of Contra Costa County General Plan. **Table 4** presents the County's applicable noise standards for the project and adjacent uses.

Table 4: Contra Costa County Land Use Compatibility for Community Noise Environments

Land Use Category	Normally Acceptable Community Noise Exposure
Residential – Low Density Single Family, Duplex, Mobile Homes	50 – 60 dB
Residential – Multi-Family	50 – 65 dB
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70 dB
Office Buildings, Business, Commercial and Professional	50 – 70 dB

Source: Contra Costa County General Plan, 2005-2020.

Project Site Noise

To establish the existing noise environment, noise measurements were conducted near residences located in close proximity to the project site. These noise measurements provide baseline ambient noise levels, allowing the potential increase in sound due to the project to be quantified.

Figure 9 shows the noise measurement locations. The measurement at location 1 was made in a tree adjacent to the east property line of the site. The measurement at location 2 was made in a tree, 5 feet from the backyard fence of a residence on Megan Court. Locations 1 and 2 were continuous 48-hour noise measurements. Location 3 was a short-term, 15-minute measurement near the residence across Miranda Ave. The Ldn at location 3 was computed by comparing the short-term measurement with the results of the long-term measurement that was made at location 1.

The dominant noise source at the existing residences near the project site is traffic along Stone Valley Road. During the 48-hour-long measurements there were seven daytime responses (four engines, two ambulances and one combined ambulance/fire engine) and one nighttime response

Noise Measurement Locations

Figure 9

Source: Rosen Goldberg Der & Lewitz, Inc., 2010.

(combined ambulance/fire engine). Other noises include typical residential activities such as crews performing maintenance of landscaping. **Table 5** summarizes the measurement results from the Noise Analysis.

The closest residence to the east, along Stone Valley Road (location 1), is exposed to an Ldn of 59 dBA which is considered "normally acceptable" for residences. The residence to the north, on Megan Court (location 2), is exposed to an Ldn of 53 dBA which is also considered "normally acceptable". Across Miranda Avenue, at location 3, an Ldn of 64 dBA was measured, which is considered "conditionally acceptable".

Table 5: Noise Measurements – Existing Conditions

Location	A-weighted Noise Level, dBA Ldn
1 – East Property Line of Site	59
2 – North Property Line of Site	53
3 – Across Miranda Avenue from Site	64

Note: Ldn calculated based on correlation with simultaneous measurement at 24-hour monitor.

Source: Rosen, Goldberg, Der & Lewitz, Inc., 2010.

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 the other agencies?

Less-than-Significant Impact. The project is not anticipated to expose employees who would occupy the project site to excessive outdoor or indoor noise levels. As described above, the project site is located adjacent to Stone Valley Road which is the dominant noise source in the project area. A maximum 7-foot-high precast concrete wall would be constructed around the proposed equipment yard on the site. This wall would also serve as a sound barrier for noise from Stone Valley Road. The siting of the fire station building away from Stone Valley Road would further reduce roadway noise levels at the building. Additionally, the residential development surrounding the project site does not generate a substantial amount of noise, and there are no industrial uses located within the project vicinity that could potentially generate substantial levels of noise. It is therefore anticipated that outdoor noise levels would remain within acceptable levels.

As a matter of law, Title 24 requires that buildings are insulated so that indoor noise is minimized to acceptable levels – 45 dBA CNEL as required by the County's General Plan. Therefore, interior and exterior operational noise levels would remain within acceptable standards as established the County's General Plan and the impacts would be less than significant. No mitigation is required.

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

Less-than-Significant Impact. Construction of the project would not require pile driving or other activities that could generate ground borne noise or vibration. Operation of a fire station typically does not accommodate activities that generate ground borne noise or ground borne vibration. Therefore, impacts related to the generation of ground borne noise or ground borne vibration during construction and operation would be less than significant.

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

Less-than-Significant Impact. In general, the number of fire engines and ambulances that pass by homes on Stone Valley Road is not expected to change significantly if Fire Station 32 is relocated to the project site. The fire station responds to calls with a fire engine, ambulance or both. According to data from the Fire District, there were 536 emergency responses from July 1, 2008 – June 30, 2009. This corresponds to about 1.5 emergency responses per day. A map showing the location of the responses indicates that about 59% of the engines or ambulances would have traveled westerly along Stone Valley Road to respond to the call whereas 41% would have traveled easterly, as shown in **Figure 10**.

Table 6 shows the number of responses along Stone Valley Road for existing and future (with project) conditions.

Table 6: Number of Emergency Responses per Week along Stone Valley Road

Location	Existing	With Project
West of Existing Fire Station	6	6
Between Existing and Proposed Fire Stations	4	6
East of Proposed Fire Station	4	4

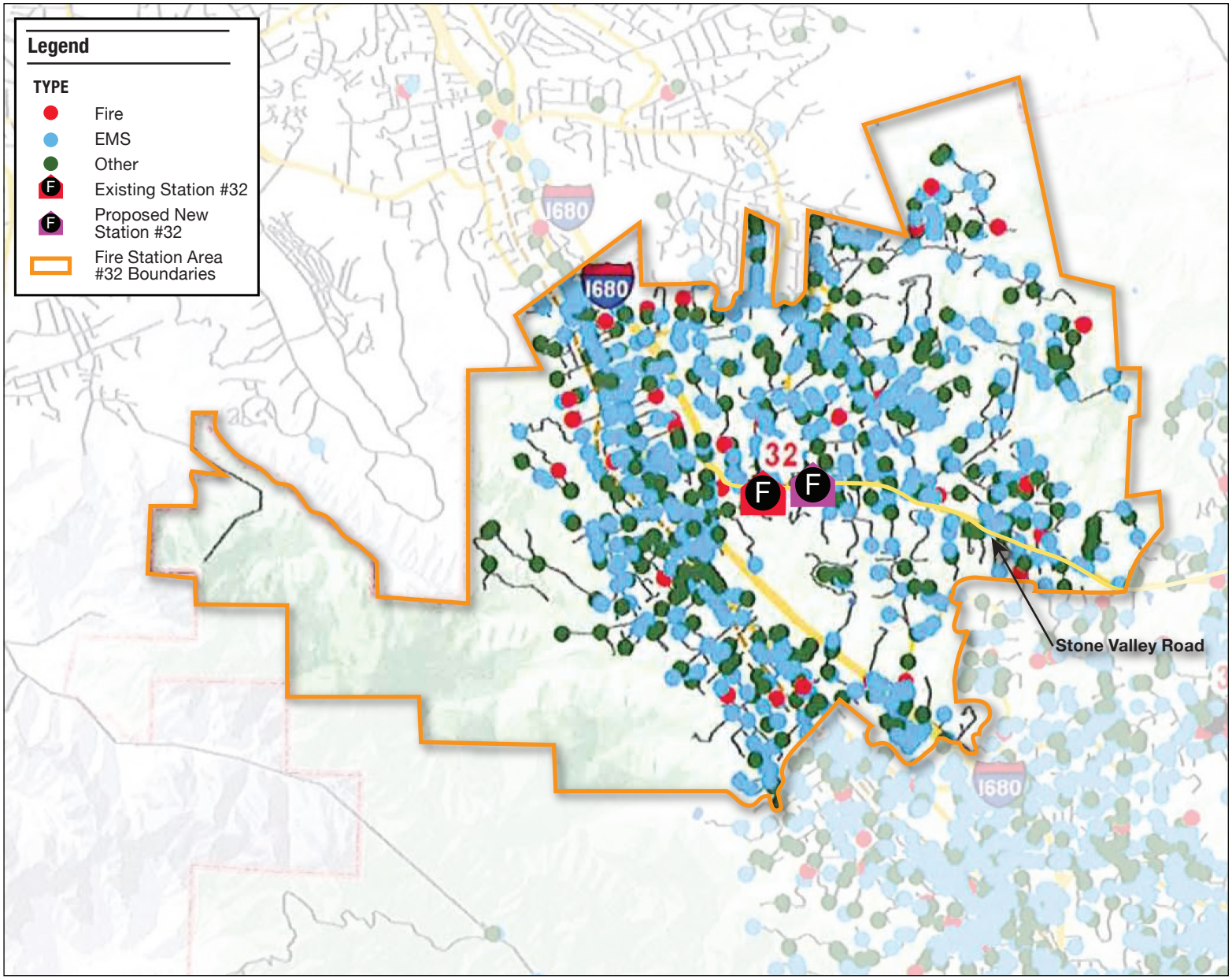
Source: Rosen, Goldberg, Der & Lewitz, Inc., 2010.

For example, residences located along Stone Valley Road, west of the existing station, currently experience about six passbys of emergency vehicles from the fire station per week. They would continue to experience six responses if the station were located at the proposed project site. Likewise, the residences east of the proposed project site would experience four passbys in both the existing and future conditions. Only those residences between the existing and proposed station would experience a slight change, from the current four passbys per week to a future condition of six passbys per week.

In order to quantify the change, the Ldn along Stone Valley Road was calculated due to the emergency responses and compared to the existing ambient noise level along Stone Valley Road as measured at location 1. Residences between the existing and proposed station locations would experience an increase in Ldn of less than 1 dBA after taking into account the two additional responses passing by those residences. This increase in Ldn would not result in a perceptible change in noise levels above existing conditions.

Residences in close proximity to the proposed station would be exposed to noise from testing equipment as well as engines responding to calls. Noise from the emergency responses would consist of the sound of engines or ambulances leaving and returning to the station. Sirens would not typically be used when exiting the station since the new station would be located at a signal controlled intersection that would be retrofitted to allow for automatic preemption by emergency response vehicles.

Policy 11-7 of the Contra Costa County General Plan states that public projects shall be designed and constructed to minimize long term noise impacts on existing residences. The project is consistent



Fire Station #32
All Incidents January 2006 to March 2008

Figure 10

Source: San Ramon Valley Fire Protection District, 2009.

with the goal and implementation measures since it has incorporated measures such as a noise barrier along the east property line as well as siting of the building so that it blocks noise to the residences north of the project site.

Table 7 shows the resulting increase in Ldn due to the testing and emergency responses. Testing occurs once every two days but for the purposes of this analysis, the data in **Table 6** shows the effect of testing and emergency responses during a typical test day.

Table 7: Noise Levels Increase for Residences in Close Proximity to the Project Site

Noise Sensitive Receiver	Day-Night Average Sound Level, Ldn (dBA)			
	Existing	Project Generated	Total	Increase
Location 1	59.1	55.5	60.7	1.6
Location 2	53.0	37.3	53.1	0.1
Location 3	64.1	46.9	64.2	0.1

Source: Rosen, Goldberg, Der & Lewitz, Inc., 2010.

Noise level at locations 1 would increase by 1.6 dBA. The noise levels at location 2 and 3 would increase by 0.1 dBA. An increase of less than 3 dBA would not result in a perceptible change in noise levels. Therefore, impacts related to noise generated by emergency responses and equipment testing on the project site are considered less-than-significant. No mitigation is required.

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

Significant unless Mitigation Incorporated. The project would result in a temporary increase in construction-related noise levels that could impact nearby residences. Construction noise on the project site would vary depending on the type of equipment being used. The noisiest construction activities would occur during grading, site preparation, and foundation work. Interior building work is typically the quietest, as the building shell provides a buffer and attenuates the noise transfer. Construction activities would begin as early as April 2011 and are expected to occur over a period of approximately 12 months.

Construction-related noise is regulated by Policy 11-8 of the Contra Costa County's General which limits construction activities to daytime hours when noise sensitivity tends to be lowest. Implementing **Mitigation Measure XII-1** would reduce construction noise related impacts to a less-than-significant level.

> **Mitigation Measures XII-1:** Construction activities shall be prohibited between the hours of 5:30 P.M. and 7:30 A.M. on weekdays. Construction activities shall also be prohibited on weekends. In addition, all construction equipment shall be equipped with properly operating mufflers of a type recommended by the manufacturer and all impact tools shall be shielded per the manufacturer's specifications.

Significance after Mitigation: Mitigation Measure XII-1 would reduce potential project impacts from construction-related noise by limiting construction activities to daytime hours. During daytime hours, noise sensitivity tends to be the lowest, as the ambient noise level tends to be higher and

construction noise is not considered as intrusive. Further, construction activities would be prohibited on weekends. The required muffling and shielding would further reduce noise generation by construction equipment. Therefore, implementation of **Mitigation Measure XII-1** would reduce construction related-noise impacts to a less-than-significant level.

e) Located within an airport land use plan?

and

f) Located within the vicinity of a private airstrip?

No Impact. The project site is not located within an airport land use plan or within two miles of a private or public airport. The closest public use airport to the project site is the Buchanan Field Airport in the City of Concord, located about 9.5 miles to the north. Therefore, the project would not expose site visitors or employees to excessive noise levels from public or private airports. No impact relative to airport noise would occur and no mitigation is required.

XIII. Population and Housing

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Project Setting

The Association of Bay Area Governments (ABAG) provides growth projections for the San Francisco Bay Area. According to the 2009 ABAG population projections for the Alamo-Blackhawk region[12], population is expected to grow at a rate of 3 percent from 2010 to 2020, from 25,200 individuals in 2010 to 26,000 individuals in 2020. ABAG projects that the region will continue to grow through 2030 to 26,300 people, an increase of 1 percent from 2020.[13]

During the same time period, the number of jobs in the Alamo-Blackhawk region is projected to increase by 42 percent from 5,430 jobs in 2010 to 7,710 jobs in 2020. Job growth will continue through 2030, reaching an estimated 7,870 jobs.[14]

The Regional Housing Needs Allocation (RHNA) is a state-mandated process for determining how many housing units, including affordable units, each community must plan to accommodate.

[12] Projections for only Alamo are not available; however, ABAG provides projections for the Alamo-Blackhawk region. Blackhawk is an unincorporated community southeast of Alamo.

[13] ABAG Projections, 2009.

[14] ABAG Projections, 2009.

According to ABAG and the Contra Costa County 2009 Housing Element, unincorporated Contra Costa County has a RHNA goal of 3,508 housing units from 2007 to 2014. As of 2009, the County has provided 1,350 of the 3,508 housing units mandated by the RHNA.[15]

a) Induce substantial population growth?

No Impact. The project involves the construction and operation of a new fire station and does not include the construction of residential units. The project would provide replacement employment for existing employees of Fire Station #32 and would not result in a change in the number of personnel. Therefore, the project would result in no population growth.

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

and

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

Less-than-Significant Impact. The project site currently contains a single vacant housing unit, and would not therefore displace any existing residents.

The project would result in the loss of one housing unit, and as noted above, the County has not yet met its goal of providing 3,508 new housing units to meet its share of the regional housing need. The demolition of one housing unit would not substantially affect the ability of the County to meet the goals of the Housing Element and the RHNA, and would not necessitate the construction of replacement housing elsewhere, especially since the house is currently vacant. The impact of this demolition is considered less than significant, and no mitigation is required.

[15] Annual Housing Element Progress Report 2009.

XIV. Public Services

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Project Setting

San Ramon Valley Fire Protection District

The San Ramon Valley Fire Protection District (SRVFPD) is an "all-risk" department providing services that include structure firefighting, wildland firefighting, paramedic ambulance, technical rescue and hazardous materials response as well as other services. The SRVFPD provides all-risk fire, rescue and emergency medical services to the Contra Costa County communities of Alamo, Blackhawk, the Town of Danville, Diablo, the City of San Ramon, the southern area of Morgan Territory and the Tassajara Valley. The service area of the SRVFPD is comprised of 155 square miles.

The SRVFPD employs nearly 200 personnel, including approximately 50 volunteers serving in volunteer programs, and staffs 15 companies, including structure and wildland engines, ladder trucks, ALS ambulances, specialized Haz Mat, Rescue, Communications and other support units. The SRVFPD also owns and operates the 911 communications center staffed daily with three dispatchers. The Fire Station 32 serves the suburban Alamo community in Contra Costa County. The station

operates on 48-hour shifts with six firefighters per shift. The SRVFPD has established a response time goal of 7 minutes for 90 percent of all service calls.[16] The SRVFPD has indicated that its current service levels are adequate based on existing development in the service area.

Contra Costa County Sheriff

Police services at the project site would be provided by the Contra Costa County Sheriff's Office. The station closest to the project site is the Valley Station, located approximately 1-mile to the west. The Sheriff's Office indicated that sustained budget reductions over the last eight years have resulted in staffing decreases. The reduction in staff has impacted the Sheriff's Office ability to respond to calls for service. [17]

Schools

The project site is located with the San Ramon Valley Unified School District (SRVUSD). The SRVUSD serves over 25,000 students in kindergarten through twelfth grade from the communities of Alamo, Blackhawk, Danville, Diablo, and San Ramon, in addition to a small portion of the cities of Walnut Creek and Pleasanton.

Parks

Refer to **Section XV, Recreation** for a discussion of park and recreational facilities.

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 impacts?

Less-than-Significant Impact. The construction of a new fire station would not result in a substantial adverse effect on the provision of emergency services.

The new station would maintain the same number of personnel, crew work shifts, and equipment as the existing fire station. However, the proposed project would enhance fire protection services and pedestrian safety as described below.

The project includes a retrofitted traffic light at the Miranda Avenue and Stone Valley Road intersection that would have automatic pre-emption, which would allow fire engines and ambulances to have the right-of-way and to be able to turn onto Miranda Avenue and Stone Valley Road without potential traffic safety hazards. Fire crews at the project site would be able to control the traffic signal at Stone Valley Road and Miranda Avenue by using signal pre-emption. Signal pre-

[16] San Ramon Valley Fire Protection District. *Standards of Cover*, August 2010. Page 6.

[17] Chris Thorsen, Captain, Contra Costa County Sheriff's Office. Personal Communication, October 11, 2010.

emption would allow vehicles to completely clear the intersection of Miranda Avenue and Stone Valley Road before emergency vehicles exit the station. The signal pre-emption is controlled from the station building and would remain in place until all cars had cleared the intersection and the emergency vehicles had left the station. This project feature would improve safety for pedestrians and motorists near the site during emergency response and is an improvement over the operation of the existing station. The signal pre-emption would provide an efficient way to allow for egress of vehicles from Miranda Avenue and would not adversely affect existing operations at the Miranda Avenue/Stone Valley Road intersection. Therefore, the project would have a beneficial effect on fire protection services in the area. No mitigation is required.

ii) Police protection impacts?

Less-than-Significant Impact. According to the Contra Costa County Sheriff, the project would not diminish police service levels or increase police response times.[18] Since the project would not directly increase population of the area, the project would not generate the need for new or expanded sheriff facilities. Although the Sheriff's Office has indicated that staffing has decreased over the years, the project would not result in a change to the existing service population. Thus, the project would have a less-than-significant impact to police services. No mitigation is required.

iii) School impacts?

Less-than-Significant Impact. The project site is located within the SRVUSD. Because the project would not include any residential development, it would not directly introduce additional students into the SRVUSD. The project is replacing an existing fire station and would not introduce substantial new employment growth or a commensurate increase in the number of students attending the SRVUSD schools. Thus, the project would have a less than significant impact on schools. No mitigation is required.

iv) and v) Park and other public facilities impacts?

Less-than-Significant Impact. Open space, parks, and other public facilities are typically provided to serve a residential population. Because the project would not include any residential development, it would not be expected to generate demand for open space, parks, or other public facilities typically serving residential populations. Additionally, because the project is replacing an existing fire station, it would not induce a substantial increase in employment opportunities in the County and would not generate a substantial population increase. Therefore, the project would not create additional demands for parks and other public facilities near the project site. Thus, impacts to parks and other public facilities would be less than significant. Impacts to recreational facilities are further discussed in **Section XV, Recreation**.

[18] Ibid.

XV. Recreation

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Project Setting

There are no parks or recreational facilities on the project site. The County requires that special units of government called "County Service Areas" maintain local parks facilities in the unincorporated areas. The County Service Area R-7A, also known as Alamo Parks and Recreation, provides park maintenance and improvements in the project area. Livorna Park, approximately 1 mile north of the project site, and Hap Magee Ranch Park, approximately 1 mile south of the project site, are the closest County-owned parks maintained by Alamo Parks and Recreation. The County uses an acreage/population ratio for neighborhood parks and community parks to determine parkland needs in unincorporated communities.

a) Increase use of existing facilities?

No Impact. The project does not propose new residential units. Since the project would replace an existing fire station facility, it would not generate any new employment or result in any population increase in the Alamo area. Therefore, the project would not increase the use of existing park and recreational facilities. No mitigation is required.

b) Include/require construction of new facilities?

No Impact. The project does not include the construction or expansion of any recreational facilities. As noted above, the project would not generate additional demand for park and recreational facilities in the project area. At the time of this publication, the County Building Inspection Division is revising the building permit fee schedule which may include a park dedication fee for commercial developments. The project applicant would be required to pay a park dedication fee if the fee schedule has been revised when the building permit application is submitted. Thus, the project would not have an impact in regards to the construction or expansion of recreational facilities. No mitigation is required.

XVI. Transportation and Traffic

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

Project Setting

Information in this section was drawn from a memorandum prepared by ESA, entitled *Traffic Implications of the Proposed Relocation Fire Station 32 (Alamo) by the San Ramon Valley Fire Protection District,* September 2009. This memorandum is found in **Appendix J**.

The project site is located on the northeast corner of the Stone Valley Road and Miranda Avenue intersection, a signalized, three-way intersection. Miranda Avenue has a separate eastbound left-turn lane (with a left-turn signal) and westbound right-turn lane. The traffic light operates as a demand-responsive signal (i.e., the signal changes in response to the presence of vehicles on the different approaches).

Miranda Avenue was recently improved by Contra Costa County to provide striped bicycle lanes on both sides of the street; bicycle lanes extend from just north of Stone Valley Middle School to just north of the Stone Valley Road intersection. There is also a sidewalk on the east side of Miranda Avenue that currently ends at the northern property boundary and does not extend to Stone Valley Road.

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

and

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

Less-than-Significant Impact. The project would not result in an increase in vehicle trips as it would replace the existing fire station facility located 0.4-mile east of the project site. As the operational characteristics of the fire station would not change, there would be no change in staffing, work shifts, or the number or type of apparatus. Every two days at shift change, six firefighters would enter the project site and six firefighters would leave the project site. The existing fire station currently has an annual average of 1.5 calls for service per day. These rates are not expected to increase or decrease with project implementation and would not exceed level of service standards or conflict with any policies in the General Plan.

As discussed in the project setting above, Contra Costa County improved Miranda Avenue to have striped bicycle lanes on both sides of the street. Additionally, the project would extend the existing sidewalk along the project frontage to connect to the sidewalk along Stone Valley Road.

~~There are no bus stops in the project vicinity.~~ The Alamo/Danville/San Ramon Student Route 623 stops across from the project site on Stone Valley Road at Miranda Avenue, Monday through Friday, at 3 PM. ~~Therefore~~However, the project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system or an applicable congestion management program and the impact would be less than significant. No mitigation is required.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. There are no public or private air transportation facilities within the vicinity of the project site. The Buchanan Field Airport, located approximately 9.5 miles north of the project site, is the most proximate in location. The project would therefore have no impact to air traffic patterns.

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

Less-than-Significant Impact. The project would include several design features that would address public safety. The project would include a retrofitted traffic light at the Miranda Avenue and Stone Valley Road intersection that would have automatic pre-emption, allowing fire engines and ambulances to have the right-of-way and to be able to turn onto Miranda Avenue without potential traffic safety hazards. The pre-emption device would be controlled from inside the fire station and would be activated when the fire station receives an emergency call. The applicant is required to prepare and submit a signing and striping plan for the review and approval of the Public Works Department. The County may require a striped "keep clear zone" in front of the project site's driveway on Miranda Avenue, depending on certain criteria, such as: the proximity of the driveway to the intersection and the traffic signal; the locations of the signal loops; the length of the driveway; and the retrofitting of the signal with automatic pre-emption. Additionally, the project would include a new sidewalk on the east side of Miranda Avenue along the project frontage. These design features would therefore address public safety for pedestrians and motorists and the impact would be less than significant. No mitigation is required.

e) Result in inadequate emergency access?

Significant unless Mitigation Incorporated. The fire station is designed to provide adequate circulation for all vehicles entering and exiting the site. As discussed above, the project includes enhancements such as automatic signal pre-emption to improve access from the station during emergencies. This would be an improvement over the conditions at the existing station.

The project site would include access from Stone Valley Road. Circulation through the site is provided via a bypass lane on the south side of the apparatus bay. The bypass lane and the apparatus and crew ingress on Stone Valley Road would each have automatic gates. **Mitigation Measure XVI-1** would ensure that emergency service providers would be able to open the gates to enter the project site.

> **Mitigation Measure XVI-1**: Prior to the issuance of occupancy permits, Contra Costa County shall ensure that emergency service providers, including the Contra Costa County Sheriff's Office, have the ability to open the automatic gates at the ingress on Stone Valley Road and the bypass lane to the south of the apparatus bay.

Significance after Mitigation: Implementation of **Mitigation Measure XVI-1** would ensure that all emergency service providers would have adequate access to the project site and would reduce the impact to a less-than-significant level.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The project would not conflict with any adopted policies, plans or projects that support public transit, bicycle, or pedestrian facilities. There are existing striped bicycle lanes on both sides of Miranda Avenue. The project includes the provision of a new sidewalk on the east side of Miranda Avenue along the project frontage. Together, these facilities would safely accommodate bicyclists and pedestrians on Miranda Avenue. Additionally, there are no public transit facilities within the

project vicinity. The nearest public transit line is the County Connection route 21 which is located approximately 1 mile west of the project site. Therefore, project-related traffic would not affect transit times in the area and the project would enhance pedestrian facilities.

XVII. Utilities and Service Systems

	Significant Impact	Significant Unless Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Project Setting

Wastewater and Wastewater Treatment

Wastewater treatment services in the project area are provided by the Central Contra Costa Sanitary District (CCCSD). The CCCSD treatment plant in Martinez, located approximately 10 miles north of the project site, would treat the wastewater generated by the project. During dry weather

conditions, the treatment plant has a design capacity of 55 mgd (million gallons per day) and during wet weather conditions has a design capacity of 240 mgd. The CCCSD treatment plant treats an average of 45 mgd.[19]

An existing 8-inch public main sewer line is located along the western and southern boundaries of the project site within Stone Valley Road and Miranda Avenue.

Domestic Water and Water Treatment

Water is provided to the project area by the EBMUD. The EBMUD water supply system collects, transmits, treats, and distributes water from the Mokelumne River and local runoff water to parts of Alameda and Contra Costa County. EBMUD has water rights that allow for delivery of up to 325 million gallons per day (mgd) from the Mokelumne River.[20] Local runoff water amounts collected fluctuate between wet and drought years; average local supply is approximately 15 to 25 mgd during wet years and near zero during drought conditions.[21] In total, EBMUD has the rights to a water supply of approximately 335 to 340 mgd.

Water from the Mokelumne River is collected at the Pardee Reservoir located in the Sierra foothills and is transported to serve the EBMUD communities. There are six water treatment plants within the EBMUD system, which are capable of filtering and processing a combined total of about 375 mgd.[22] The project area is served by EBMUD's Walnut Creek Water Treatment Plant located at 2201 Larkey Lane in the City of Walnut Creek.

The project site is located in the Danville Pressure Zone, which serves an elevation range of 250 to 450 feet.[23] There are existing EBMUD 12-inch water mains beneath Stone Valley Road and Miranda Avenue that would serve the project.[24]

Storm Drainage System

The project site is currently developed with a single-family residence. Stormwater runoff generated on the project site generally flows to the north. See **Section IX, Hydrology and Water Quality** for a discussion of the storm drainage system on the site.

Solid Waste

Allied Waste Services provides solid waste collection, transfer, and disposal services to the community of Alamo, including the project site. Solid waste collected from Alamo is taken to the

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[19] Central Contra Costa Sanitary District. Facilities: Treatment Plant. http://www.centralsan.org/index.cfm?navId=154. Accessed October 22, 2010.

[20] East Bay Municipal Utilities District (EBMUD). Urban Water Management Plan, 2005. Page 2-1.

[21] East Bay Municipal Utilities District (EBMUD). Urban Water Management Plan, 2005. Page 2-4.

[22] East Bay Municipal Utilities District (EBMUD). All About EBMUD, 2007. Page 5.

[23] David J. Rehnstrom, Senior Civil Engineer, EBMUD. Personal Communication, October 12, 2010.

[24] Ibid.

Contra Costa Transfer & Recovery Transfer Station, a waste disposal and recycling facility located in the City of Martinez. Waste is then transferred from the Contra Costa Transfer & Recovery Transfer Station to the Keller Canyon Landfill in the City of Pittsburg, which serves all of Contra Costa County.

The Keller Canyon Landfill is permitted to accept 3,500 tons of waste per day and has a total estimated permitted capacity of approximately 75 million cubic yards. As of October 2010, less than 19 million cubic yards (25 percent of total capacity) has been filled, thereby leaving 75 percent of total capacity available for use. The Keller Canyon Landfill is expected to reach capacity by December 2030.

California State Law Assembly Bill 939 (AB 939), known as the Integrated Water Management Act, was passed to address the increases in the state waste stream and decrease in landfill capacity. As a result, AB 939 mandates a reduction of waste being disposed; jurisdictions were required to meet diversion goals of 50 percent. In 2001, the unincorporated areas of Contra Costa County, the City of Oakley, and the Ironhouse Sanitary District formed the Contra Costa/Ironhouse/Oakley Regional Agency for the purpose of maximizing efforts to comply with AB 939. The Contra Costa/Ironhouse/Oakley Regional Agency reported a waste diversion rate of 54 percent in 2006.[25]

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

Less-than-Significant Impact. As discussed further under item (e) below, the project would be accommodated within the existing CCCSD wastewater services and facilities and no expansion of any CCCSD facilities is required. Therefore, the project would not hinder the CCCSD's ability to maintain conformance with the RWQCB and would not exceed the wastewater treatment requirements of the RWQCB. No mitigation is required.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Significant unless Mitigation Incorporated. The CCCSD assumes that a fire station generates wastewater comparable to the average single-family residence at a rate of 225 gallons of wastewater per day (gpd).[26] Demolishing the existing single-family residence and constructing the proposed fire station would therefore not result in an added burden on the CCCSD treatment plant or collection

[25] California Integrated Waste Management Board. Jurisdictional Profile for Contra Costa/Ironhouse/Oakley Regional Agency. Available at: http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile2.asp?RG=R&JURID=617&JUR=Contra+Costa%2FIronhouse%2FOakley+Regional+Agency>. Accessed October 15, 2010.

[26] Russ Leavitt, Engineering Assistant III, CCCSD. Personal Communication, October 11, 2010.

system.[27] As previously mentioned, there are existing 8-inch sewer mains located within Stone Valley Road and Miranda Avenue. The existing diameter of these lines is sufficient to serve the 225 gpd of wastewater generated by the project and no up-sizing of the lines is needed.

Other sewer facilities further downstream do not have adequate flow-carrying capacity under CCCSD's current design criteria. Improvements to correct the deficiencies are or will be included in the CCCSD's Capital Improvement Plan. Improvements to CCCSD's existing facilities that are required as a result of new development would be funded from applicable CCCSD fees and charges. The property owner would be required to pay these fees and charges at the time of connection to the sewer system. **Mitigation Measure XVII-1** would ensure that impacts related to sewer facilities would be reduced to a less-than-significant level.

> **Mitigation Measure XVII-1:** Prior to the issuance of building permits, the County Building Inspection staff shall confirm that CCCSD has reviewed the project improvement plans and determined the fees and charges applicable to the project, and that the project applicant has submitted payment of such fees and charges.

Significance after Mitigation: Less than significant. Implementation of **Mitigation Measure XVII-1** would mitigate impacts related to sewer facilities to a less-than-significant level.

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?

Less-than-Significant Impact. As discussed in **Section IX. Hydrology and Water Quality**, although the project would include grading and site improvements, it would not substantially alter the existing drainage patterns of the site. The project would contain four bio-retention areas, which are expected to decrease the rate and volume of stormwater runoff discharged from the project site. Therefore, this impact is considered less than significant. No mitigation is required.

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

Significant unless Mitigation Incorporated. As discussed under item (b) and (e) above, the wastewater generated by the project is assumed by CCSD to be comparable to the wastewater generated by a single-family residence. Based on this assumption, the project's water demand would also be similar to a single-family residence.

The projections for water supply and demand within EBMUD's UWMP are based on uniformly applied growth projections derived from City and County general plans. Since the project would generally maintain the existing water demand for the project site, it would not require additional water supply capacity beyond what has already been projected and planned for as part of the UWMP. No new or expanded water facilities would be required.

[27] Ibid.

Per its 2005 UWMP, EBMUD anticipates meeting the projected water demand for its service area through 2030 for normal water years, but notes that EBMUD's current water supply is insufficient to meet customer needs during multiple-year droughts.[28] In the event of a single drought year, EBMUD would follow the actions outlined in EBMUD's "Urban Water Shortage Contingency Plan." In the event of multiple drought years, EBMUD will impose a Drought Management Program which will ration the amount of water used. Customer water reduction goals during drought years are set based on customer categories—commercial and institutional sectors are expected to reduce water demand by 20 percent during multiple drought years.[29] **Mitigation Measure XVII-2** would ensure that impacts related to water supplies would be reduced to a less-than-significant level.

> **Mitigation Measure XVII-2:** In the event of multiple drought years, the project applicant shall comply with EBMUD's Drought Management Program and reduce water usage by 20 percent. In the event of critical shortages (shortages of 25 percent or more), the project applicant shall comply with reduction goals based on customer categories set by EBMUD.

Significance after Mitigation: Less than significant. Implementation of **Mitigation Measure XVII-2** would mitigate impacts related to water supplies during drought years to a less-than-significant level.

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?

Significant unless Mitigation Incorporated. The CCCSD assumes that a fire station generates wastewater comparable to the average single-family residence at a rate of 225 gallons of wastewater per day (gpd).[30] Demolishing the existing single-family residence and constructing the proposed fire station would therefore not result in an added burden on the CCCSD treatment plant or collection system.[31] As previously mentioned, there are existing 8-inch sewer mains located within Stone Valley Road and Miranda Avenue. The existing diameter of these lines is sufficient to serve the 225 gpd of wastewater generated by the project and no up-sizing of the lines is needed.

Other sewer facilities further downstream do not have adequate flow-carrying capacity under CCCSD's current design criteria. Improvements to correct the deficiencies are or will be included in the CCCSD's Capital Improvement Plan. Improvements to CCCSD's existing facilities that are required as a result of new development would be funded from applicable CCCSD fees and charges. The

[28] East Bay Municipal Utilities District (EBMUD). 2005. Urban Water Management Plan, pp 4-1.

[29] East Bay Municipal Utilities District (EBMUD). 2005. Urban Water Management Plan, Table 3-3.

[30] Russ Leavitt, Engineering Assistant III, CCCSD. Personal Communication, October 11, 2010.

[31] Ibid.

property owner would be required to pay these fees and charges at the time of connection to the sewer system. **Mitigation Measure XVII-1** would ensure that impacts related to sewer facilities would be reduced to a less-than-significant level.

Significance after Mitigation: Less than significant. Implementation of **Mitigation Measure XVII-1** would mitigate impacts related to sewer facilities to a less-than-significant level.

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

Less-than-Significant Impact. The California Integrated Waste Management Board estimated that public/institutional facilities generate approximately 0.007 pounds per square feet per day.[32] Thus, the proposed 9,400 square foot fire station would generate approximately 66 pounds of solid waste per day, or approximately 12 tons of solid waste per year. The project's solid waste generation would be less than one percent of the total daily acceptance capacity at the Keller Canyon Landfill. Current solid waste facilities have sufficient capacity to serve the project's solid waste disposal needs and the project would have a less-than-significant impact related to solid waste and landfill capacity.

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

Less-than-Significant Impact. As previously stated, the Contra Costa/Ironhouse/Oakley Regional Agency is currently in conformance with AB 939 by exceeding the required 50 percent solid waste diversion rate. The existing Fire Station #32 is currently located within the agency's boundaries and contributes to AB 939 compliance. Since this project would replace the existing fire station facility and would not result in an increase in the number of employees, it is assumed the project would continue to be in conformance with the solid waste diversion regulation. No mitigation is required.

[32] California Integrated Waste Management Board. Estimated Solid Waste Generation Rates for Institutions. Available at: <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Institution.htm>. Accessed October 15, 2010.

XVIII. Mandatory Findings of Significance

	Significant Impact	Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have the potential to degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Have the potential to degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less-than-Significant Impact. As described throughout this document, the project would not substantially degrade the quality of the environment and would not impact special-status habitat or plant and wildlife species, as described in **Section IV, Biological Resources**. As described in **Section V, Cultural Resources**, the project includes mitigation measures to reduce potential impacts on undiscovered cultural resources, including prehistoric Native American remains. Implementation of these mitigation measures would reduce potential impacts on prehistoric Native American remains

to a less-than-significant level if they are uncovered as a result of construction activities. The mitigation measures would also reduce impacts on important examples of major California history and prehistory to a less-than-significant level if they uncovered during construction activities.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less-than-Significant Impact. The cumulative discussion determines whether the proposed project in combination with other approved or foreseeable projects would result in a significant cumulative impact, and, if so, whether the project's contribution to the significant cumulative impact would be cumulatively considerable.

The analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may select a list of projects, including those outside the control of the agency, or, alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate the regional or area-wide conditions contributing to the cumulative impact.

This Initial Study evaluates cumulative impacts using *The Contra Costa County General Plan Environmental Impact Report (EIR) (1990, as amended in 2005)*. The General Plan EIR evaluated the programmatic build out of the Contra Costa County 1990 General Plan, which included the existing fire station. As the project would replace the existing fire station it was analyzed as part of the build out of the General Plan.

The General Plan EIR evaluated future development, as identified in the current General Plan, and concluded that significant environmental effects would occur in the following environmental resource areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Utilities

These significant environmental impacts were mitigated by implementation of General Plan policies and actions, compliance with other agency regulations and procedures, project-specific development proposal review requirements, service standards, payment of impact fees, and project-specific technical studies. The General Plan EIR identified significant and unavoidable impacts related to land use, agricultural resources and open space, transportation and circulation, public facilities and services, and resources and safety.

The project has complied with these mitigation measures through the payment of impact fees, preparation of project-specific technical studies, and application of project specific mitigations that reduce potentially project-specific significant impacts to less than significant levels. Mitigation measures are identified in this Initial Study to reduce potential project-specific significant impacts related to air quality, biological resources, cultural resources, geology, hazards, hydrology and water quality, noise, transportation, and utilities. By reducing project impacts to a less-than-significant level, the project contribution to significant cumulative impacts would not be considerable.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Significant Unless Mitigation Incorporated. As described throughout this document, the project would not result in substantial environmental effects on human beings. Mitigation measures are identified in this Initial Study to reduce potential significant impacts related to air quality, biological resources, cultural resources, geology, greenhouse gases, hazards, hydrology and water quality, noise, transportation, and utilities. Implementation of these mitigation measures would ensure that the project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly.

List of Appendices

The following studies and reports were prepared specifically for the project and are included as appendices in either hard copy or electronic format to this Initial Study.

Appendix A Proposed Plant Palette

Appendix B Biological Evaluation Report

Appendix C Tree Survey

Appendix D Cultural Report

Appendix E Geotechnical Exploration

Appendix F URBEMIS2007 and BAAQMD GHG Model

Appendix G Phase I Environmental Site Assessment and Asbestos Survey

Appendix H Storm Water Control Plan and Hydraulic Analysis

Appendix I Noise Analysis

Appendix J Traffic Implications Memorandum

All Sources Consulted

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Lead Agency and Report Preparers

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