



SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

**James & Susan Enkosky
AP20120024**

August 8, 2013

**LAND USE SERVICES DEPARTMENT
PLANNING DIVISION
385 N. Arrowhead Avenue, San Bernardino, CA 92415-0182
(909) 387-8311 Fax (909) 387-3223
<http://www.sbcounty.gov/landuseservices>**

SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APN:	0349-123-14
APPLICANT:	James & Susan Enkosky
COMMUNITY:	Devore/5th Supervisorial District
LOCATION:	Intersection of Kimbark Avenue and Rancho Avenue (787 Kimbark Avenue)
PROJECT NO:	AP20120024
STAFF:	Ernest Perea, Contract Planner
REP(S):	Joseph E. Bonadiman & Associates
PROPOSAL:	Grading permit for streambed alteration

USGS Quad: Devore
T, R, Section: T2N, R5W, Sec.21
Thomas Bros.: Page 515 Grid: C-4

Community Plan: N/A
OLUD: Single-Residential (RS-1)
Overlays: FS3 (Fire Safety 3),

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services Department – Current Planning
385 North Arrowhead Avenue
San Bernardino, CA 92415-0182

Contact Person: Ernest Perea, Contract Planner
Phone No: (951) 214-2739
E-mail: ernestperea@gmail.com
Project Sponsor: Joseph E. Bonadiman & Associates
234 N. Arrowhead Avenue
San Bernardino, CA 92408
Phone No: (909) 885-3806

Fax No: (909) 387-3223

PROJECT DESCRIPTION:

The project includes improvements to approximately 180 feet of the Kimbark Creek as it traverses the property. Activities and improvements in the wash include:

- The removal of willows (*Salix* spp.) and poison oak (*Toxicodendron diversilobum*) within the on-site riparian corridor (no mechanical grading activities will occur within jurisdictional areas);
- Rearranging rocks within the existing stream channel to surround existing pools (no dredge or fill activities will occur within jurisdictional areas);
- Placing rocks from adjacent uplands on the existing stream crossing at the southern

property boundary; and

- The construction of an approximate 16-foot stone arched footbridge spanning the wash.

The project will also include the construction of two lined, upland ponds, outside the riparian zone, which are not hydrologically connected to the on-site/off-site jurisdictional areas. The two ponds will only be hydrologically connected to each other. The north pond will outfall to the south pond for the purpose of providing overflow containment during high water stages in the north pond. The water source for the ponds will be rainfall, with some supplemental water provided via the on-site municipal water connection to date. Additional improvements to the land surrounding the wash include the construction of a tennis court, an engineered retaining wall less than 6 feet high, a gazebo, multiple natural stone pathways, and landscaping. (See Exhibits X and X).

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

The site consists of 3.9 acres that is developed with a single-family residence and a detached barn/accessory structure. Kimbark Avenue is a paved roadway and abuts the western boundary of the site. The eastern (rear) portion of the site is vacant land that contains a portion of the Kimbark Creek. (See Figure 6).

The following table describes the existing land use and zoning for the project site.

Table 1. Existing Land Use and Zoning

AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
Site	Residential	RS-1 (Single-Residential)
North	Residential	RS-1 (Single-Residential)
South	Residential	RS-1 (Single-Residential)
East	Residential	RS-1 (Single-Residential)
West	Residential	RS-1 (Single-Residential)

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Federal: USACE; State of California: CDFW, RWQCB

County of San Bernardino: Land Use Services- Building and Safety, Public Works

Local: None

EVALUATION FORMAT

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
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Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. Therefore, no impacts are identified or anticipated and no mitigation measures are required.
2. Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
4. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (Listing the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

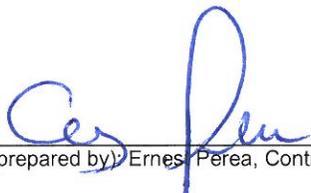
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

- The proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- The proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.



Signature (prepared by): Ernest Perea, Contract Planner

8-15-13
Date



Signature: Terri Rahhal, Planning Director

8-15-2013
Date

APPENDICES

A. Hydrology Report

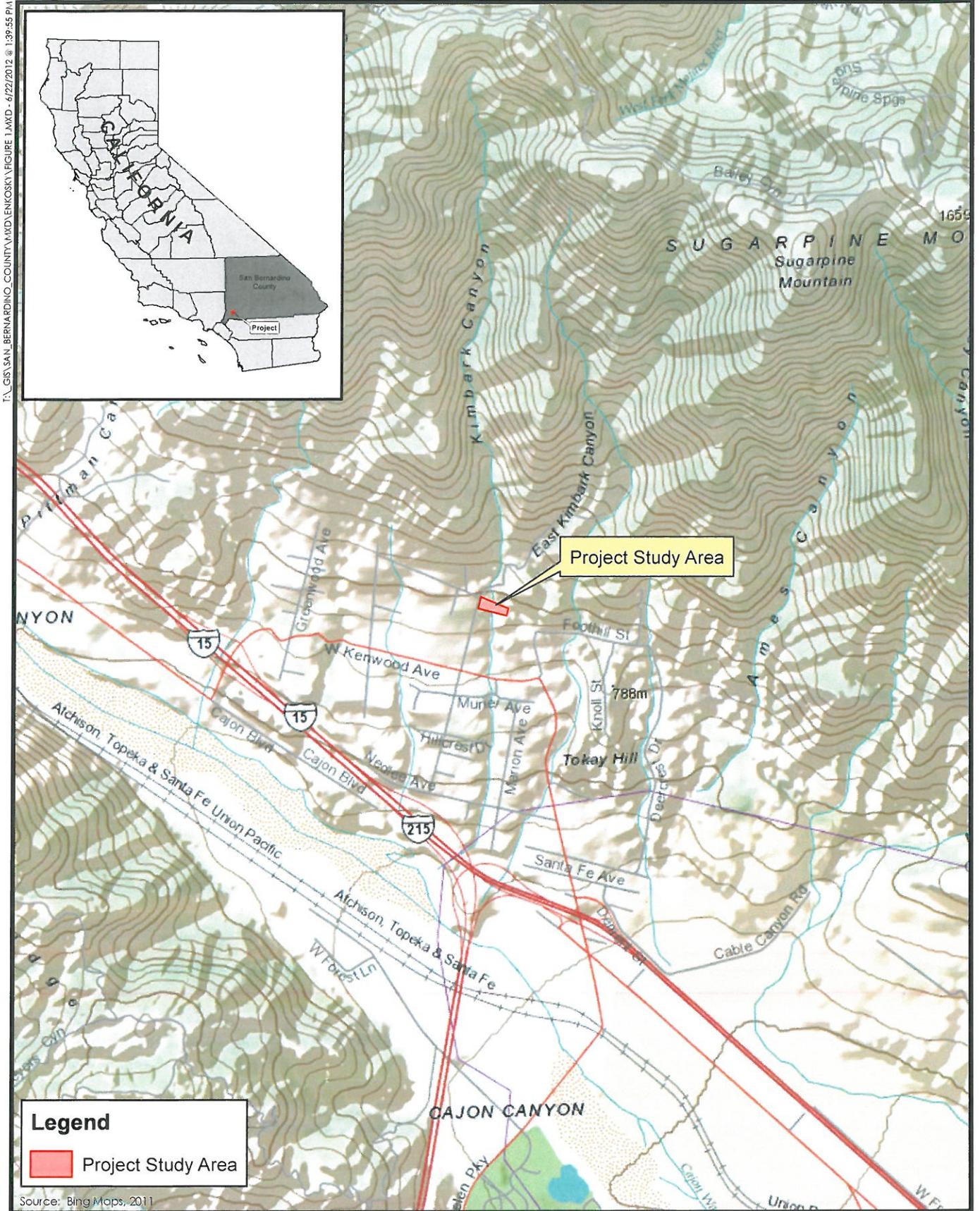


Figure 1
Project Location



Kimbark Creek Existing Conditions



Property Boundary Existing Conditions

**AP20120024-Enkosky
Streambed Alteration & Grading
Permit**

Site Photos

Figure 3

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
I. AESTHETICS - Would the project				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (Check if project is located within the view-shed of any Scenic Route listed in the General Plan):

- I a) **No Impact.** The County General Plan Open Space Element, Policy OS 5.1. states that a feature or vista can be considered scenic if it:
- Provides a vista of undisturbed natural areas;
 - Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed; or,
 - Offers a distant vista that provides relief from less attractive views of nearby features such as views of mountain backdrops from urban areas).

The project will occur on a site developed with a single-family home. While the project affects the on-site viewshed of the wash and surrounding land, the views are not locally important or dominant. Therefore, the project will have no impact on a scenic vista.

- I b) **No Impact.** The proposed project will have no impact on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, because the site is not adjacent to a state scenic highway and there are no rock outcroppings or historic buildings on the project site.

- I c) **Less Than Significant Impact.** The project site is located in an area characterized by single-family residential development. A project is generally considered to have a

significant impact on visual character if it substantially changes the character of the project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its surroundings.

The project includes the removal of an existing barn and associated animal pens and the creation of a retaining wall, landscaped watercourse, and tennis court. The proposed retaining wall, landscaped watercourse, and tennis court will not interfere with the existing visual character of the site or the surroundings. Therefore, impacts are considered less than significant.

- I d) **No Impact.** The project does not include the construction of any artificial light sources.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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II. AGRICULTURE and FORESTRY RESOURCES -

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of rest forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- 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 nonforest use.

SUBSTANTIATION (Check if project is located in the Important Farmlands Overlay):

- II a) **No Impact.** The subject property is not identified or designated as Farmland on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The site is not being used for agricultural purposes. Therefore, there will be no impact to farmland.
- II b) **No Impact.** The proposed project site is currently zoned as single-family residential (RS-1). Therefore, there would not be a conflict with agricultural zoning. In addition, there is no Williamson Act contract that affects the project site according to the County Assessor's Office.
- II c) **No Impact.** The project site is located within the RS-1 (Single-Residential) zone and there is no timberland located on the project site. Therefore, the not in conflict with Forest or Timberland zoning. The project does not propose a zone change that would convert existing forest or timberland zoning.
- II d) **No Impact.** There are no forest lands within the project site so the loss of forest land or conversion of forest land to non-forest use would not occur as a result of the project.
- II e) **No Impact.** The project site is not located in close proximity to forest land. The project site is not designated as Farmland as shown on the maps prepared by the California Department of Conservation. The site is not being used for agricultural purposes. Therefore the project will not disrupt or damage of the existing environment that would result in the loss of farmland to nonagricultural use.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (Discuss conformity with the South Coast Air Quality Management District Plan, if applicable):

III a-e) **Less Than Significant Impact.** The project includes the installation of residential landscaping and will not result in any increases in local emissions or any other air quality concern.

Therefore, no significant adverse impacts are identified or anticipated for Air Quality and no mitigation measures are required.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	N o I m p a c t
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IV. BIOLOGICAL RESOURCES - Would the project:

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

SUBSTANTIATION (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database)

The information contained in this section is based field work and analysis prepared by Summer Pardo, P.W.S., Associate Biologist, PMC, Rancho Cordova, CA, October 2012. Ph. 916-517-4496. Email: spardo@PMCWorld.com

- IV a) **Less Than Significant impact With Mitigation Incorporated.** A query of the California Natural Diversity Database (CNDDDB) for known occurrences of special-status species within 1 and 5 miles of the project site was conducted and is presented on Figure 4. In addition, the US Fish and Wildlife Service's (USFWS) Information, Planning, and Conservation (IPaC) System was queried to identify federally listed species that may be affected by the proposed project. Critical habitat for protected species within the project vicinity has been mapped and is presented on Figure 5. The results of these queries are attached, and the data from both queries has been synthesized into Table 2.

TABLE 2
PROTECTED SPECIES WITH THE POTENTIAL TO OCCUR ON-SITE

<i>Scientific Name</i>	<i>Common Name</i>	<i>Federal Listing</i>	<i>State Listing</i>	<i>Rare Plant Rank</i>
Plants				
<i>Asclepias nyctaginifolia</i>	<i>Mojave milkweed</i>	<i>None</i>	<i>None</i>	<i>2.1</i>
<i>Brodiaea filifolia</i>	<i>three-leaved brodiaea</i>	<i>Threatened</i>	<i>Endangered</i>	<i>1B.1</i>
<i>Calochortus palmeri</i> var. <i>palmeri</i>	<i>Palmer's mariposa lily</i>	<i>None</i>	<i>None</i>	<i>1B.2</i>
<i>Calochortus plummerae</i>	<i>Plummer's mariposa lily</i>	<i>None</i>	<i>None</i>	<i>1B.2</i>
<i>Chorizanthe parryi</i> var. <i>parryi</i>	<i>Parry's spineflower</i>	<i>None</i>	<i>None</i>	<i>1B.1</i>
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	<i>white-bracted spineflower</i>	<i>None</i>	<i>None</i>	<i>1B.2</i>
<i>Dodecahema leptoceras</i>	<i>slender-horned spineflower</i>	<i>Endangered</i>	<i>Endangered</i>	<i>1B.1</i>
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	<i>Santa Ana River woollystar</i>	<i>Endangered</i>	<i>Endangered</i>	<i>1B.1</i>
<i>Heuchera parishii</i>	<i>Parish's alumroot</i>	<i>None</i>	<i>None</i>	<i>1B.3</i>
<i>Lilium parryi</i>	<i>lemon lily</i>	<i>None</i>	<i>None</i>	<i>1B.2</i>
<i>Lycium parishii</i>	<i>Parish's desert-thorn</i>	<i>None</i>	<i>None</i>	<i>2.3</i>
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	<i>short-joint beavertail</i>	<i>None</i>	<i>None</i>	<i>1B.2</i>
<i>Schoenus nigricans</i>	<i>black bog-rush</i>	<i>None</i>	<i>None</i>	<i>2.2</i>

<i>Wildlife</i>			
<i>Anaxyrus californicus</i>	<i>arroyo toad</i>	<i>Endangered</i>	<i>None</i>
<i>Catostomus santaanae</i>	<i>Santa Ana sucker</i>	<i>Threatened</i>	<i>None</i>
<i>Charina umbratica</i>	<i>southern rubber boa</i>	<i>None</i>	<i>Threatened</i>
<i>Dipodomys merriami parvus</i>	<i>San Bernardino kangaroo rat</i>	<i>Endangered</i>	<i>None</i>
<i>Empidonax traillii extimus</i>	<i>southwestern willow flycatcher</i>	<i>Endangered</i>	<i>Endangered</i>
<i>Polioptila californica californica</i>	<i>coastal California gnatcatcher</i>	<i>Threatened</i>	<i>None</i>
<i>Rana draytonii</i>	<i>California red-legged frog</i>	<i>Threatened</i>	<i>None</i>
<i>Rana muscosa</i>	<i>southern mountain yellow-legged frog</i>	<i>Endangered</i>	<i>Candidate Endangered</i>
<i>Vireo bellii pusillus</i>	<i>least Bell's vireo</i>	<i>Endangered</i>	<i>Endangered</i>

CNPS Ranking System

Rareness Ranks

<i>1A</i>	<i>Presumed Extinct in California</i>
<i>1B</i>	<i>Rare, Threatened, or Endangered in California and Elsewhere</i>
<i>2</i>	<i>Rare, Threatened, or Endangered in California, But More Common Elsewhere</i>
<i>3</i>	<i>More Species Information Needed</i>
<i>4</i>	<i>Limited Distribution</i>

Threat Ranks

<i>0.1</i>	<i>Seriously threatened in California</i>
<i>0.2</i>	<i>Fairly threatened in California</i>
<i>0.3</i>	<i>Not very threatened in California</i>

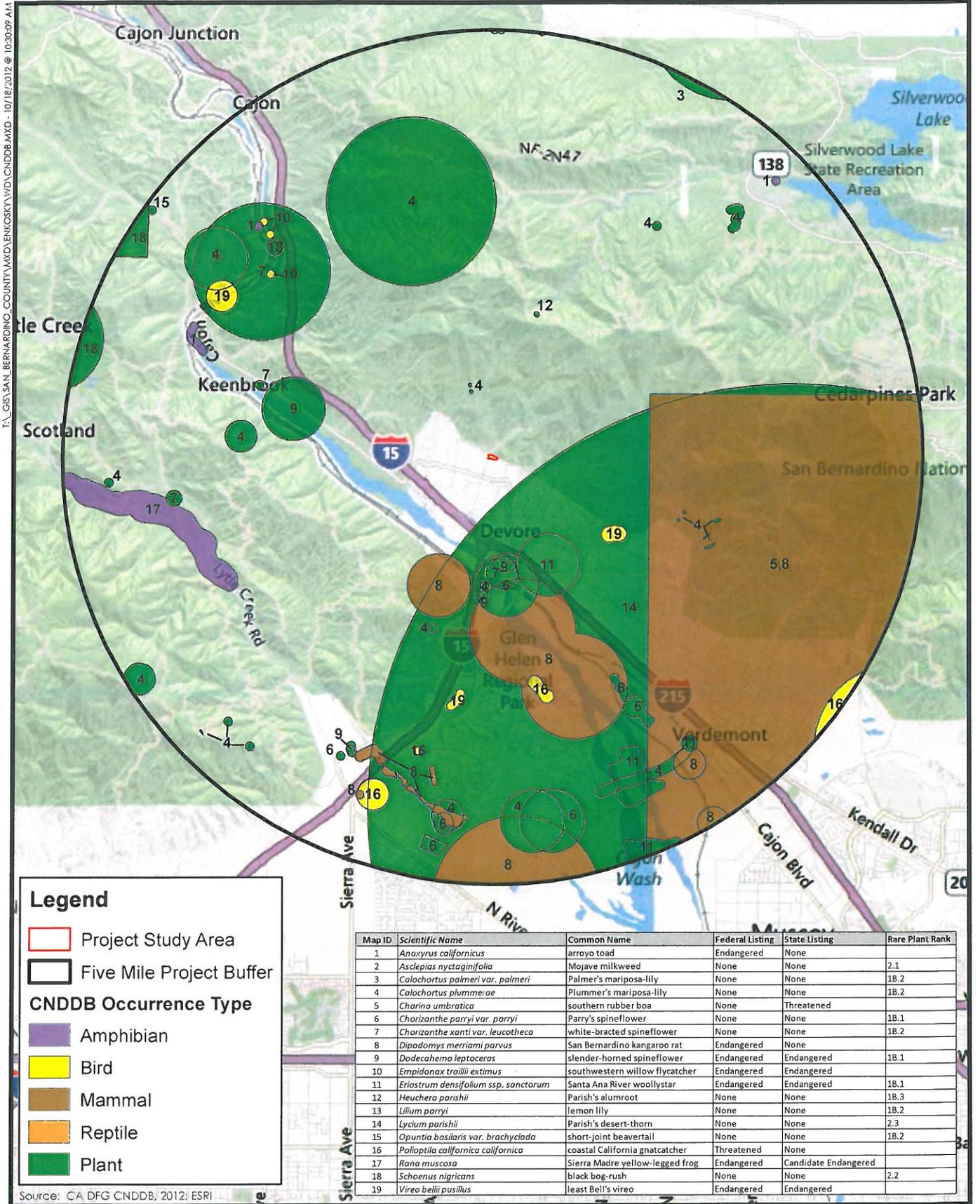


Figure 4
Previously Recorded Occurrences of Special-status Species within Five Miles of the Project Area

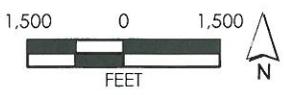
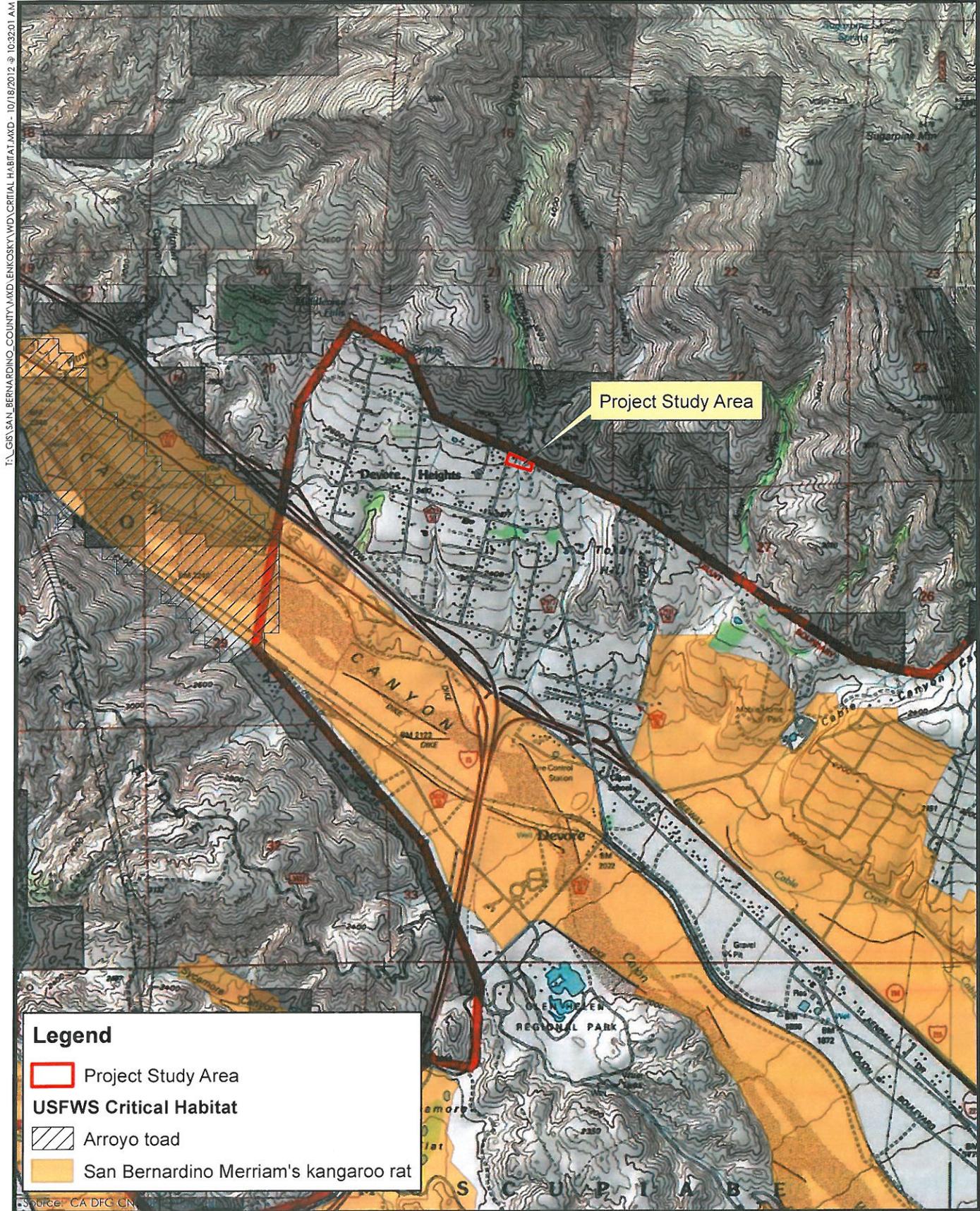
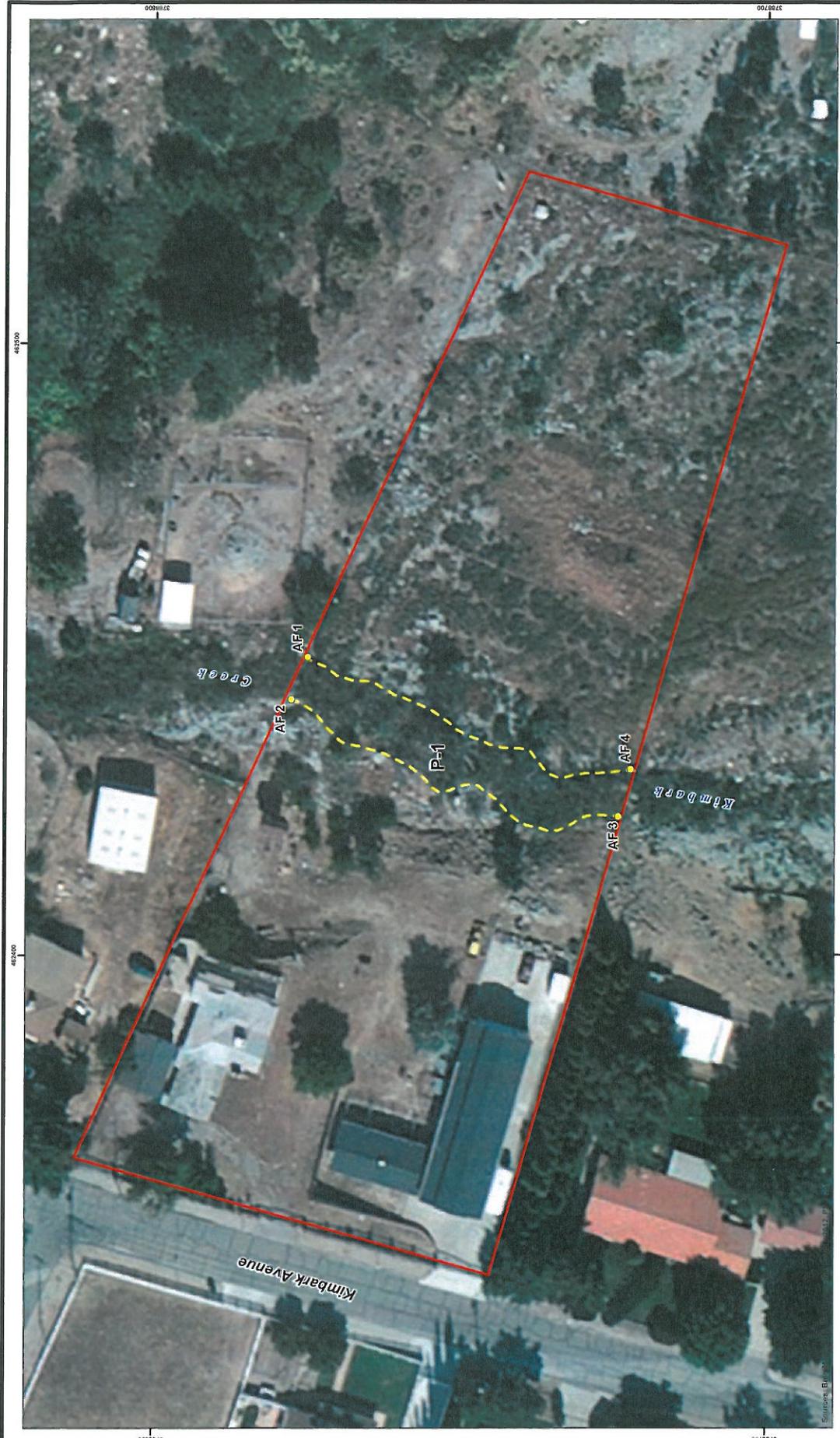


Figure 5
 Arroyo Toad and San Bernardino Merriam's Kangaroo Rat Critical Habitat

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Legend

- Annual Floodplain (AF)
- Estimated AF (P-1)
- Project Study Area

Map ID	Water Body Type	Width at OWM (feet)	Total in SCA (acres)	Total in SCA (linear feet)
P-1	Intermittent/Perennial	approx. 20	0.17	200
	Total	N/A	0.17	195



Soil Types

- Project Study Area
- MRC Soil
- ND - Bobola-Hallford (fines), association, 2 to 15 percent slopes
- SOC - Bobola gravelly loamy sand, 0 to 9 percent slopes
- SPC - Bobola stony loamy sand, 2 to 9 percent slopes



SCALE 1" = 600'
 North Arrow
 UTM Zone 11NAD 83

Figure 6: Jurisdictional Delineation
 Enkosky Property, Devore, CA

Delineated By: Summer Pardo
 Drafted By: Jonathan Fazio
 Date: May 8, 2012





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Figure 7
Aerial Photo 2002
PMC

Plants

Mojave milkweed is not a state or federally protected species; however, it is included on the California Native Plant Society (CNPS) List 2.1. Species possessing the 2.1 rank are defined as rare, threatened, or endangered in California, more common elsewhere, and seriously endangered in California. The CNDDDB query revealed that there is one documented occurrence for this species in the project vicinity; however, the date documented is listed as June 15, 1916. This species is typically associated with Mojavean desert scrub and pinyon-juniper woodland communities between approximately 3,300 and 5,600 feet elevation. This species is unlikely to be adversely impacted by the proposed project, as the on-site elevation is between 2,500 and 2,700 feet, which is below the typical range occupied by this species.

Three-leaved brodiaea is federally listed as threatened, state listed as endangered, and included on the CNPS List 1B.1. Species possessing the 1B.1 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being seriously endangered in California. This species is typically associated with clay soils in chaparral, cismontane woodland, coastal scrub, playa, and valley and foothill grassland, as well as vernal communities between approximately 80 and 3,700 feet elevation. The CNDDDB query did not identify any known occurrences for this species within 5 miles of the project site. Additionally, the project site is characterized by residential development on the eastern side of Kimbark Creek, with some disturbance on the western side of the creek associated with materials stockpiled from recent activities, while the remainder of the western portion of the property is relatively undisturbed. The soils on the western side of the property are classified by the Natural Resources Conservation Service (NRCS) as Soboba Stony Loamy Sand – 2 to 9 percent slopes (map unit symbol SpC, Figure 6). The typical profile for this soil unit is described by the NRCS as very stony loamy sand within the first 10 inches. The lack of known occurrences and suitable soils make it unlikely that the proposed project will adversely affect three-leaved brodiaea.

Palmer's mariposa lily is not a state or federally protected species; however, it is included on the CNPS List 1B.2. Species possessing the 1B.2 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being fairly endangered in California. This species is typically associated with mesic soils in chaparral, lower montane coniferous forests, meadows, and seeps between approximately 3,300 and 7,800 feet elevation. The project site is located below the elevational range preferred by this species; therefore, the proposed project is not likely to adversely affect Palmer's mariposa lily.

Plummer's mariposa lily is not a state or federally protected species; however,

it is included on the CNPS List 1B.2. Species possessing the 1B.2 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being fairly endangered in California. This species is typically associated with granitic, rocky soils and chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest, as well as valley and foothill grassland communities between approximately 330 and 2,300 feet elevation. The project site is located just above the elevational range preferred by this species, but contains suitable soils/habitats; therefore, the proposed project has the potential to impact Plummer's mariposa lily.

Parry's spineflower is not a state or federally listed species; however, it is included on the CNPS List 1B.1. Species possessing the 1B.1 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being seriously endangered in California. This species is typically associated with sand or rock openings in chaparral, cismontane woodland, and coastal scrub, as well as valley and foothill grasslands between approximately 900 and 4,025 feet elevation. The proposed project is within the preferred elevational range and contains suitable soils/habitats for this species; therefore, the project has the potential to impact Parry's spineflower.

White-bracted spineflower is not a state or federally protected species; however, it is included on the CNPS List 1B.2. Species possessing the 1B.2 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being fairly endangered in California. This species is typically associated with sandy or gravelly soils in coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon-juniper woodlands between approximately 990 and 3,960 feet elevation. Although the project site contains potentially suitable soils for this species, the known habitat associations are not consistent with the chaparral habitat in the undisturbed portions of the site.

Slender-horned spineflower is listed as both a state and federal endangered species, in addition to being included on the CNPS List 1B.1. Species possessing the 1B.1 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being seriously endangered in California. This species is typically associated with sandy soils in chaparral, cismontane woodland, and coastal scrub (alluvial fan) communities between approximately 660 and 2,500 feet elevation. Kimbark Creek has the potential to provide suitable habitat for this species; however, prior to the removal/trimming of riparian vegetation, the on-site portions of the creek were characterized by a nearly homogenous stand of willow (*Salix* spp.). Due to the canopy cover density, it is unlikely that this species would have been found on-site prior to the site activities; therefore, it is not likely that adverse impacts to this species will be incurred by the proposed project.

Santa Ana River woollystar is listed as both a state and federal endangered

species, in addition to being included on the CNPS List 1B.1. Species possessing the 1B.1 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being seriously endangered in California. This species is described by the Center for Plant Conservation's National Collection of Endangered Plants as being restricted to sandy floodplain areas in Southern California. The CNPS Inventory of Rare and Endangered Plants in California defines it as being typically associated with sandy or gravelly soils in chaparral and coastal scrub (alluvial fan) communities between approximately 300 and 2,015 feet elevation. The project site is above the preferred elevational range for this species, and Kimbark Creek does not contain suitable habitat for this species. Therefore, the proposed project is unlikely to adversely affect the Santa Ana River woollystar.

Parish's alumroot is not a state or federally protected species; however, it is included on the CNPS List 1B.3. Species possessing the 1B.3 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being considered not very endangered in California. This species is typically associated with rocky, sometime carbonate soils in lower montane coniferous, subalpine coniferous, and upper montane coniferous forests between approximately 4,950 and 12,540 feet elevation. The project site is located below the preferred elevational range for this species; therefore, it is not likely that the proposed project will result in adverse impacts to Parish's alumroot.

Lemon lily is not a state or federally protected species; however, it is included on the CNPS List 1B.2. Species possessing the 1B.2 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species being fairly endangered in California. This species is typically associated with mesic soils in lower montane coniferous forest, meadow/seep, riparian forest, and upper montane coniferous forest communities between approximately 4,025 and 9,060 feet elevation. The project site is below the preferred elevational range and does not contain suitable soils/habitats for this species; therefore, it is not likely that the proposed project will result in adverse impacts to this species.

Parish's desert-thorn is not a state or federally protected species; however, it is included on the CNPS List 2.3. Species possessing the 2.3 rank are defined as rare, threatened, or endangered in California, more common elsewhere, and not very endangered in California. This species is typically associated with coastal and Sonoran desert scrub between approximately 1,000 and 3,300 feet elevation. This species is highly unlikely to occur within the project area, as it is considered extirpated within San Bernardino County by CNPS, and no known occurrences for the species have been documented in the vicinity since 1885.

Short-joint beavertail is not a state or federally protected species; however, it is included on the CNPS List 1B.2. Species possessing the 1B.2 rank are defined as rare, threatened, or endangered in California and elsewhere, with the species

being fairly endangered in California. This species is typically associated with chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland communities between approximately 1,565 and 5,940 feet elevation. The proposed project is within the preferred elevational range and contains suitable habitats for this species; therefore, the proposed project has the potential to impact short-joint beavertail.

Black bog-rush is not a state or federally protected species; however, it is included on the CNPS List 2.2. Species possessing the 2.2 rank are defined as rare, threatened, or endangered in California, more common elsewhere, and fairly endangered in California. This species is typically associated with alkaline marshes and swamps between approximately 495 and 6,600 feet elevation. The project site is located within the preferred elevational range, but the site lacks suitable soils/habitats for this species; therefore, it is not likely that the proposed project will result in adverse impacts to black bog-rush.

Wildlife

The **arroyo toad** is currently listed as endangered by the USFWS. Critical habitat for the species has been designated and includes a portion of Cajon Creek to the west-northwest of the project site (Figure 5). The USFWS's Arroyo Toad 5-Year Review: Summary and Evaluation (2009) was reviewed to determine life history and habitat suitability for this species. A brief outline of life history and habitat characteristics is provided below.

- Preferred breeding habitat is characterized by slow-moving streams containing shallow, sandy pools; nearby sandbars; and adjacent sand or gravel stream terraces.
- Breeding typically occurs from February to July in perennial streams.
- Outside breeding season, arroyo toads are essentially terrestrial, and utilize a variety of upland habitat types that includes sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral, and grasslands.
- Stream order, elevation, and floodplain width are correlated with habitat suitability for the species. Tend to be found on upstream segments of third to sixth order streams, due to a lack of coarse sediments, and low flow rates that keep silt and clay suspended in the water column.
- Arroyo toads go into aestivation from about August to January.

Based on these descriptions of life history and habitat utilization, it is unlikely that impacts to the arroyo toad occurred as a result of site activities for several reasons. First, Kimbark Creek is a relatively high-flow velocity stream due to the topographic gradient. Second, the on-site stream was historically characterized by a bed and bank composed of large (1–2') cobble. Third, the soils in the

adjacent uplands are extremely rocky and composed of large cobble similar in size to those found in the stream channel. Fourth, based on a review of topographic maps, Kimbark Creek appears to be a first order stream. This conclusion is also supported by the high flow rates and coarse bed/bank materials, which are indicators of a first order stream. Fifth, site activities occurred in the fall of 2011, which is outside the typical breeding season (February–July). Due to these combined factors, it is presumed that no impacts to the arroyo toad occurred as a result of the site activities or will occur as a result of future site development activities.

The **Santa Ana sucker** is currently listed as threatened by the USFWS. The USFWS's Recovery Outline for Santa Ana Sucker (2012) describes this species as occupying Southern California watersheds from their upper reaches in the San Gabriel and San Bernardino mountains, out to the Pacific Ocean. Occupied streams are characterized as perennial, with variable (low to high) flow velocities and water depths, as well as containing a substrate with a mixture of gravel, cobble, open sand, shallow riffles, and deeper runs/pools. The Recovery Outline defines the distribution as:

- Santa Ana River Watershed
 - Extirpated: Upper Santa Ana River and Tributaries – Upstream of S. La Cadena Avenue
 - Extant: Middle Santa Ana River and Tributaries – S. La Cadena to Prado Dam
 - Extant: Lower Santa Ana River and Tributaries – Prado Dam to near California State Highway 90
- San Gabriel River Watershed
 - Extant: San Gabriel River – East Fork
 - Extant: San Gabriel River – West and North Forks
 - Extant: San Dimas Wash
 - Extirpated: Below San Gabriel Dam – San Gabriel River Watershed
- Los Angeles River Watershed
 - Extant: Big Tujunga Creek
 - Extirpated: Los Angeles River

The project site is located in the Santa Ana watershed; however, it is upstream

of South La Cadena Avenue in Colton. Since the Santa Ana sucker is considered extirpated in the reaches and tributaries of the Santa Ana River in the project vicinity, it is unlikely that the project will result in adverse impacts to the Santa Ana sucker.

The **southern rubber boa** is currently listed as threatened by the state of California. The California Department of Fish and Game (CDFG) 2004 Species Account and CaliforniaHerps.com website were reviewed to obtain information regarding life history and habitat characteristics for this species. Based on these data, the southern rubber boa is a subspecies of the rubber boa that is found in coniferous riparian forests of the San Bernardino and San Jacinto mountain ranges, at elevations between 5,000 and 8,200 feet. Due to the fossorial nature of the species, little is known about the life history other than it is nocturnal and crepuscular, and excavates burrows under rocks, into damp sand, rotting logs, or leaf litter. The elevational range and habitats occupied by this species make it highly unlikely that any impacts to this species have occurred or will occur as a result of site development activities, since the project area is located well below 5,000 feet and the vegetative composition of the riparian area is dominated by willows and not conifers.

The **San Bernardino kangaroo rat** is currently listed as endangered by the USFWS. Critical habitat for the species has been designated, a portion of which occurs in the vicinity of the project site (Figure 5). The USFWS's San Bernardino Kangaroo Rat 5-Year Review: Summary and Evaluation (2009) was reviewed to determine life history and habitat suitability for this species. The San Bernardino kangaroo rat prefers alluvial fan sage scrub habitats in the San Bernardino, Menifee, and San Jacinto valleys. Although critical habitat and occurrences for this species have been documented in the vicinity, the project area does not contain suitable habitat for this species. Therefore, it is highly unlikely that impacts to this species occurred as a result of the site activities or will occur as a result of future site development activities.

The **southwestern willow flycatcher** is currently listed as endangered by the USFWS and the State of California. The USFWS's Recovery Plan Southwestern Willow Flycatcher (2002) was reviewed to determine life history and habitat suitability for this species. Suitable habitat for this species is defined as riparian areas generally containing dense, mesic shrub and tree communities. Common tree and shrub species present within suitable habitat include willow, seepwillow (*Baccharis* spp.), boxelder (*Acer negundo*), stinging nettle (*Urtica* spp.), blackberry (*Rubus* spp.), cottonwood (*Populus* spp.), arrowweed (*Tessaria sericea*), tamarisk (*Tamarix ramosissima*), and Russian olive (*Eleagnus angustifolia*).

Southwestern willow flycatchers typically arrive in early May, initiate nesting in late May to early June, and leave for their wintering grounds in late July through

August. Although the site historically contained potentially suitable nesting habitat for this species, the breeding chronology eliminates the likelihood that impacts to this species occurred as a result of the site activities occurring in October and November of 2011.

The **coastal California gnatcatcher** is currently listed as threatened by the USFWS. The USFWS's Coastal California Gnatcatcher 5-Year Review (2010), states that the coastal California gnatcatcher's range follows the distribution of coastal scrub communities in Southern California. The California Partners in Flight Coastal Scrub and Chaparral Bird Conservation Plan (Mock 2004) describes coastal scrub communities preferred by the species as typically dominated by California sagebrush (*Artemisia californica*), with a shrub cover of 20 to 60 percent, and an average shrub height of $1\pm$ meter. In addition, Figure 1 of the USFWS's 5-Year Review depicts the current range of coastal California gnatcatcher in California and Baja, Mexico. The northern and eastern range limits were delimited using elevation and occurrence data. Based on these data, the USFWS found that 99 percent of all occurrences were at or below 2,000 feet in elevation. Because the project site does not contain suitable habitat for this species, and the site is $500\pm$ feet above the typical elevation range, it is not likely that the proposed project will result in adverse impacts to the species.

The **California red-legged frog** (CRLF) is currently listed as threatened by the USFWS. According to the USFWS's Recovery Plan for the California Red-legged Frog (2002), CRLF exhibit a wide variety of habitat utilization throughout their life cycle. In some cases, individuals may complete their entire life cycle in one habitat; however, the preferred habitat structure includes a matrix of both suitable breeding and upland dispersal habitats. Suitable breeding habitat includes streams, deep pools, backwater areas, ponds, marshes, sag ponds, dune ponds, and lagoons. In addition, CRLF heavily utilize riparian vegetation as foraging and loafing habitat. Long-distance dispersal movements of CRLF do not appear to be tied to specific upland habitat types or corridors, but rather are straight-line, point-to-point migrations.

The project site is located within Recovery Unit #8—Southern Transverse and Peninsular Ranges. CRLF are only documented in a few locations within this recovery unit and include the San Francisquito drainage in the Angeles National Forest, Armagosa Creek near Palmdale, and Cole Creek in The Nature Conservancy's Santa Rosa Plateau Ecological Preserve. CRLF have not been documented in the eastern San Bernardino Mountains since the 1960s. Based on these data, it is not likely that the project will adversely affect CRLF.

The **southern mountain yellow-legged frog** is currently listed endangered by the USFWS and as a candidate for endangered status by the State of California. The CaliforniaHerps.com and International Union for Conservation of Nature (IUCN) Red List of Threatened Species websites were reviewed to determine life

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history and habitat suitability for this species (Nafis 2012; IUCN 2012). Mating and egg-laying for this species is defined as occurring from March to May. Additionally, preferred habitats in the Southern California mountains include rocky streams in narrow canyons, as well as the chaparral belt. The USFWS defined the following habitat elements as required:

- Water source(s) between 1,214 and 7,546 feet that are permanent and maintain water during the entire two-year tadpole growth phase.
- Riparian habitat and upland vegetation (e.g., ponderosa pine, montane hardwood-conifer mix, montane riparian woodlands, and chaparral).

Because of the requirement of persistent water for tadpole development, it is unlikely that Kimbark Creek or the on-site portions of the stream are utilized by this species; therefore, it reduces the likelihood that impacts to this species occurred as a result of the site activities in October and November of 2011.

The **least Bell's vireo** is currently listed as endangered by the USFWS and the State of California. The USFWS's Draft Recovery Plan for the Least Bell's Vireo (1998) was reviewed to determine life history and habitat suitability for this species. This species is an obligate riparian breeder, preferring structurally diverse riparian woodlands. Community structures typically utilized include cottonwood-willow woodlands, oak woodlands, and mule fat scrub.

Least Bell's vireos typically start to arrive on their Southern California breeding grounds in mid-March to early April and leave for their wintering grounds from July through September. Although the site historically contained potentially suitable nesting habitat for this species, the breeding chronology eliminates the likelihood that impacts to this species occurred as a result of the site activities in October and November of 2011.

Although the potential impacts to listed species are less than significant, impacts to non-listed sensitive species could occur. Non-listed sensitive species that have the potential to be impacted by the proposed project include raptors, migratory birds, and plants containing a CNPS rank of 1 or 2 that are not protected under state or federal regulations.

Impacts to Non-Listed Sensitive Species

Raptors and Migratory Birds

Implementation of the proposed project could result in the direct mortality or loss of habitat for raptors and migratory birds. Habitats on and adjacent to the project site may provide suitable nesting habitat for birds protected under the Migratory Bird and Treaty Act and Section 3503.5 of the California Fish and Game Code

(FGC). Therefore, removal of trees and vegetation during construction activities could result in noise, dust, human disturbance, and other direct/indirect impacts to nesting raptors and migratory bird species in the project vicinity. Potential nest abandonment and mortality to eggs and chicks would be considered potentially significant impacts.

BIO-1: Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“The project applicant shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during nesting season, then preconstruction surveys for nesting raptors and migratory birds shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.

If active nest(s) are identified during the preconstruction survey, then a qualified biologist shall monitor the nest to determine when the young have fledged. Monthly monitoring reports, documenting nest status, will be submitted to the County Planning Department until the nest is deemed inactive. The biological monitor shall have the authority to cease construction if there is any sign of distress to a raptor or migratory bird. Reference to this requirement and the Migratory Bird Treaty Act shall be included in the construction specifications.”

Special-Status Plant Species

Implementation of the proposed project could result in direct mortality or the loss of habitat for special-status plant species, which would be considered a potentially significant impact.

BIO-2: Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“The project applicant shall conduct a rare plant survey on the undisturbed portions of the site prior to initiation of land clearing activities. Surveys shall be conducted during the blooming period for Plummer’s mariposa lily (May–July), Parry’s spineflower (April–June), and short-joint beavertail (April–August). If individuals are identified, exclusionary fencing will be established around the plants to minimized damage to the plant.

- 1. Surveys shall be conducted in accordance with the Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened,***

and Endangered Plants and Natural Communities (CDFG 2000).

2. ***If any federally or state-listed, CNPS Rare Plant Rank 1 or 2 plant species are found during the surveys, specimens shall be avoided to the extent possible. Avoidance measures shall include fencing of the population(s) before construction, exclusion of project activities from the fenced-off areas (no ingress of personnel or equipment), and construction monitoring by a qualified biologist. Avoidance areas shall be identified on project plans.***
3. ***If sensitive plants cannot be avoided, the following mitigation measures shall be applied:***

Before the approval of grading plans or any ground-breaking activity within the project site, the project applicant shall submit a mitigation plan concurrently to the CDFG and the USFWS (if appropriate) for review and comment. The plan shall include mitigation measures for the population(s) to be directly affected. Minimum standards for mitigation are:

- ***Implementation of a program to transplant, salvage, cultivate, or reestablish the species either within the project site or at an off-site preserve to be protected in perpetuity. The off-site preserve shall include similar soil, climate, and associated plant species as is currently present at the site. This location will be protected in perpetuity under a conservation easement and managed appropriately to ensure the transplantation is a success. If on-site preservation is determined to be feasible, a conservation easement shall be placed over project open space areas to preserve the mitigation areas in perpetuity.***
- ***Alternatively, replacement credits may be purchased by the project applicant at an approved mitigation bank should such credits be available.***

Implementation of mitigation measures BIO-1 and BIO-2 would ensure that sensitive habitat and candidate, sensitive, and/or special-status species identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS are identified, avoided, and mitigated for where necessary. With implementation of the above mitigation measures, potential impacts would be reduced to less than significant.

IV b) **Less Than Significant Impact With Mitigation Incorporated.** The project is proposing to conduct the following site activities:

- Removal of willows (*Salix* spp.) and poison oak (*Toxicodendron diversilobum*) within the on-site riparian corridor. No mechanical grading activities will occur within jurisdictional areas.
- Rocks within the existing stream channel will be rearranged around existing pools. No dredge or fill activities will occur within jurisdictional areas.
- Rocks from adjacent uplands will be placed on the existing stream crossing at the southern property boundary. Existing stream crossings at the northern and southern property boundaries have been in place since 2000. Figure 7 contains 2002 aerial photograph of the property, in which the stream crossings are visible.
- Construction of two lined, upland ponds, outside the riparian zone, which are not hydrologically connected to the on-site/off-site jurisdictional areas. The two ponds are will only be hydrologically connected to each other. The north pond will outfall to the south pond for the purpose of providing overflow containment during high water stages in the north pond. The water source for the ponds will be rainfall, with some supplemental water provided via the on-site municipal water connection to date.

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, Section 1600 of the FGC, and Section 404 of the Clean Water Act (CWA). Project activities may result in the loss of riparian habitat from proposed vegetation disturbance or removal and possible increased sedimentation into drainages resulting from fill material inadvertently entering the waterway.

A 1602 Streambed Alteration Agreement for removal of or disturbance to riparian habitat and waters of the State (e.g., stream, lake, or river) from the CDFW may be required for the proposed project. This agreement would include measures to minimize and restore riparian habitat. The 1602 Streambed Alteration Agreement would require the project proponent to prepare and implement a riparian vegetation mitigation and monitoring plan.

Implementation of the proposed project could result in disturbance and degradation of riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. Impacts to sensitive natural communities would be considered potentially significant.

BIO-3: Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“As part of the 1602 Streambed Alteration Agreement, the project applicant shall prepare and implement a vegetation mitigation and monitoring plan for disturbed vegetation. Ratios for mitigation will be determined by the CDFG at a minimum ratio of 1:1 to ensure no net loss of vegetation within CDFG jurisdiction. “

Implementation of mitigation measure BIO-3 will ensure that impacts to riparian and other sensitive communities would be less than significant.

IV c) **Less Than Significant Impact With Mitigation Incorporated.** Implementation of the proposed project would result in the loss of jurisdictional waters of the State and of the United States, which would be considered potentially significant. (See Figure 6).

The jurisdictional delineation for the project has been verified by the CDFW; however, the US Army Corps of Engineers (USACE) has not verified the delineation to date. The on-site water feature is presumed to be jurisdictional to the USACE, the Santa Ana Regional Water Quality Control Board (RWQCB), and the CDFG.

Authorization to place fill within on-site jurisdictional features may be required by the USACE through the Clean Water Act (CWA) Section 404 permitting process prior to project implementation. If a CWA Section 404 permit were to be required, a CWA Section 401 permit would be also required from the RWQCB. If it is determined that on-site jurisdictional feature qualifies as waters of the State and would be affected by the proposed project, the project applicant would be required to obtain an authorization from the RWQCB and the CDFG to fill/disturb these features prior to project implementation. Furthermore, construction-related impacts to water quality would be mitigated through the implementation of best management practices (BMPs).

BIO-4: Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“A formal jurisdictional delineation shall be conducted for areas that will be permanently or temporarily impacted by the proposed project. If waters of the State and of the United States cannot be avoided, the project applicant shall apply for a CWA Section 404 permit from the USACE, a Section 401 permit from the Santa Ana RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW. These permits shall be obtained prior to issuance of grading permits and implementation of the proposed project.

The project applicant shall ensure that the project will result in no net loss

The project applicant shall ensure that the project will result in no net loss of waters of the State and of the United States by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits and 1602 Streambed Alteration Agreement.

Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities (these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants); and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project proponent/permit applicant retains responsibility for the implementation and success of the mitigation project.”

Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

Implementation of the above mitigation measure would reduce impacts to waters of the State and of the United States US to less than significant.

IV d) **Less Than Significant Impact.** According to the Open Space Overlay Map for the County of San Bernardino, the project site is not located within a Wildlife Corridor. In addition, Implementation of the proposed project would not interfere substantially with the movement of native resident or migratory fish or wildlife species. No established migratory routes are identified on or adjacent to the project site. Additionally, the on-site drainage feature has no direct connections to perennial features utilized by anadromous fish species. Due to the residential habitat alterations on and adjacent to the property, it is unlikely that any significant aquatic or wildlife corridors exist in the project vicinity. Therefore, there would be a less than significant impact to the movement of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, and no impediment to the use of native wildlife nursery sites will occur as a result of the proposed project.

IV e) **No Impact.** Implementation of the proposed project would not result in the removal of any trees or other locally protected biological resources; therefore, no conflict with

local policies or ordinances will occur as a result of the proposed project.

- IV f) **No Impact.** There are currently no adopted or proposed habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans that affect the proposed project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
V. CULTURAL RESOURCES - Would the project				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (Check if the project is located in the Cultural or Paleontologic Resources overlays or cite results of cultural resource review):

- V a) **No Impact.** The Project will not impact an above ground historical resource because the site is not listed on the California Historic Resources Inventory; California Historical Landmarks; California Points of Historic Interest; and/or National Register of Historic Places. In addition, there are no historic structures on the site.
- V b) **No Impact.** The project site is not identified on the Cultural Resources Sensitivity Overlay Maps contained in the County of San Bernardino General Plan. However, the Project is subject to the County's standard condition of approval regarding cultural resources that requires the developer to halt work and to retain a qualified archaeologist approved by the County to assess the significance of the resource(s) and to identify appropriate management recommendations. This is a mandatory requirement and not considered a Mitigation Measure.
- V c) **No Impact.** The project site is not identified on the Cultural Resources Sensitivity Overlay Maps contained in the County of San Bernardino General Plan. However, the Project is subject to the County's standard condition of approval regarding paleontological resources that requires the developer to halt work and to retain a qualified paleontologist approved by the County to assess the significance of the resource(s) and to identify appropriate management recommendations. This is a mandatory requirement and not considered a Mitigation Measure.

- V d) **Less Than Significant Impact.** In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code Section 7050.5 dictates that no further disturbances shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 5097.98. With adherence to State Health and Safety Code Section 7050.5 which stipulates the process to be followed when human remains are encountered, no mitigation measures are necessary.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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VI. GEOLOGY AND SOILS - Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii. Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii. Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv. Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION (Check if project is located in the Geologic Hazards Overlay District):

VI a) **No Impact.** The following responses are based in part on a review of the *Geologic Hazards Overlay Map* contained in the County of San Bernardino General Plan:

i) *Alquist-Priolo Zone*: The site is not located within an identified Alquist-Priolo Earthquake Hazard Zone.

ii) *Seismic Ground Shaking*: Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Given that the site is not located on an earthquake fault zone and no habitable structures are proposed to be constructed at this time, there are no impacts.

iii) *Seismic Ground Failure (Liquefaction)*: The site is not located within an area mapped as being susceptible to liquefaction.

iv) *Landslide*: The site is not located within an area mapped as being susceptible to landslides.

VI b) **No Impact.** The footprint of the proposed project will occur within a 1.67 acre portion of a 3.9 acre residential property site. Given the limited scope of the proposed project, substantial impacts to soil erosion and topsoil loss are unlikely to occur.

VI c) **No Impact.** Lateral spreading is a term referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. As noted in the response to Question VI (aiv) above, the site is not susceptible to landslides thus the impacts from lateral spreading are considered less than significant.

According to the *Geologic Hazards Overlay Map* contained in the County of San Bernardino General Plan, the project is not located in an area that is susceptible to liquefaction or subsidence.

The project does not propose the construction of habitable structures.

VI d) **No Impact.** The project site is not located in an area that has been identified as having the potential for expansive soils. The project does not propose the construction of habitable structures.

VI e) **No Impact.** No septic system is proposed as part of the project.

VII. GREENHOUSE GAS EMISSIONS - Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

VII a) **Less Than Significant Impact.** In December 2011, the County of San Bernardino adopted the "Greenhouse Gas Emissions Reduction Plan" ("GHG Plan"). Section 5.6 of the GHG Plan identifies the procedures for reviewing development projects for consistency with the GHG Plan. The GHG Plan has been designed in accordance with Section 15183.5 of the State CEQA Guidelines which provides for streamline review of climate change issues related to development projects when found consistent with an applicable greenhouse gas emissions reduction plan. The GHG Plan includes a two-tiered development review procedure to determine if a project could result in a significant impact related greenhouse gas emissions or otherwise comply with the Plan pursuant to Section 15183.5 of the state CEQA Guidelines.

The initial screening procedure is to determine if a project will emit 3,000 metric tons of carbon dioxide equivalent (MTCO₂E) per year or more. Projects that do not exceed this threshold require no further GHG emissions analysis, but must comply with mandatory Performance Standards contained in the GHG Plan

According to the GHG Plan, the *Sample Project Sizes by Land Use Category Table* identifies a "Passive Park" of less than 200 acres as a project that will not emit more than 3,000 MTCO₂e per year and is thus considered as having a less than significant impact for GHG emissions. The project is consistent with the characteristics of a passive park so this category of land use was used to estimate GHG emissions.

Therefore, no significant adverse impacts are identified or anticipated for Greenhouse Gas Emissions and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the Environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires,				

including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

SUBSTANTIATION

- VIII a) **No Impact.** Hazardous Material means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the environment. Hazardous materials include, but are not limited to hazardous substances and hazardous waste. The project involves improvements to approximately 180 feet of the Kimbark Creek as it traverses the property which include: The removal of trees; rearranging rocks within the existing stream channel to surround existing pools; placing rocks from adjacent uplands on the existing stream crossing at the southern property boundary; and the construction of an approximate 16-foot stone arched footbridge spanning the wash. This type of use does not involve hazardous materials of the type and quantity that would pose a risk to the surrounding environment.
- VIII b) **No Impact.** The project will not 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, because The project involves improvements to approximately 180 feet of the Kimbark Creek as it traverses the property which include: The removal of trees; rearranging rocks within the existing stream channel to surround existing pools; placing rocks from adjacent uplands on the existing stream crossing at the southern property boundary; and the construction of an approximate 16-foot stone arched footbridge spanning the wash.
- VIII c) **No Impact.** There are no schools located within ¼ mile of the project site. In addition, the project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste because the project does not propose the use of hazardous materials as discuses in the response to Question VIIIa.
- VIII d) **No Impact.** Based on the *Cortese List Data Resources* webpage maintained by the California Environmental Protection Agency accessed on August 13, 2013, the project site is not included on the list of hazardous materials sites compiled in accordance with Government Code No. 65962.5.
- VIII e) **Less Than Significant Impact.** Based on the Hazards Overlay Maps contained in the County of San Bernardino General Plan, the project site is not located within an area requiring airport safety review.
- VIII f) **No Impact.** The project site is not within the vicinity or approach/departure flight path of a private airstrip.
- VIII g) **No Impact.** The project will not impair implementation of or physically interfere with an

adopted emergency response plan or emergency evacuation plan, because the project has adequate access from improved roadways.

- VIII h) **Less Than Significant Impact.** The project site is located in a Fire Safety Overlay District (FS-2) based on the *Hazards Overlay Maps* contained in the County of San Bernardino General Plan. Fire Safety Area 3 (FS3) includes areas that contain light to moderate fuel loading. The project is required to comply with any applicable standards contained in Section 82.13.060 of the Development Code pertaining to Fire Safety Area 3. Implementation of these mandatory standards will reduce any impacts to less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
IX. HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structure,				

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION The following is based in part on: Joseph E. Bonadiman & Associates Inc. 2012. *Revised Hydrology & Hydraulics Report. (Appendix A).*

- IX a) **No Impact.** While the proposed project results in landscaping and construction within the wash, the operation of the proposed project will not create a new discharge to surface waters.
- IX b) **Less Than Significant Impact.** The project will not draw upon local groundwater supplies.
- IXc-e) **Less Than Significant Impact.** The project site includes an approximate 180-foot reach of the Kimbark Creek as it transverses the residential property of 787 Kimbark Avenue in the area of Devore, San Bernardino County.

The Kimbark Creek is a tributary watershed to the Kimbark Canyon watershed, with drainage flowing from north to south across Kimbark Avenue, through the project site to a culvert under Kenwood Avenue. Drainage ultimately joins the Cajon Wash.

A hydrology and hydraulics study conducted by Joseph E. Bonadiman & Associates Inc. in June 2012 and revised in August 2012 was performed to determine what impact the proposed project will have on the drainage patterns and hydrology of the project site and surrounding area.

Table 3 demonstrates a summary of the hydraulic flows occurring on the site prior to the implementation of the proposed project, while Table 4 provides a forecast of the hydraulic flow following the completion of the proposed project. The results demonstrated in Table 4 were calculated for 2-, 5-, 10-, 20-, and 100-year flood events, and the methodology used to obtain the results is available in the *Bonadiman Hydrology Report*. Table 4 further relies on the predicted water retention of the ponds that will be included in the proposed project. The predicted water retention volume of each of the ponds is contained in Table 5.

- IX f) **Less Than Significant Impact.** The discussion for impacts c through e above demonstrates that the proposed project will not result in significant increases to the runoff

volumes on the site.

**TABLE 3
PRE-PROJECT HYDROLOGIC FLOWS**

Event	Calculated Peak Hydrograph Flow at Headworks (CFS) STA. 182.3734	Est. Peak Flow Through Channel STA. 0.0000	Max. Velocity at Headworks (FPS) STA. 182.3734	Max. Velocity at Outlet (FPS) STA. 0.0000	Calculated Total Hydrograph Volume at Headworks (AF)	EST. Total Volume Conveyed Through Channel (AF)
2-yr, 24-hr	505	505	15.64	13.06	79.74	79.74
5-yr, 24-hr	731	731	17.31	14.73	166.15	166.15
10-yr, 24-hr	1,028	1,028	18.99	16.28	356.41	356.41
20-yr, 24-hr	1,206	1,206	19.81	16.98	450.22	450.22
100-yr, 24-hr	1,742	1,280	20.12	17.27	786.74	775.01

Source: Joseph E. Bonadiman & Associates Inc. 2012

**TABLE 4
POST-PROJECT HYDROLOGIC FLOWS**

Event	Calculated Peak Hydrograph Flow at Headworks (CFS) STA. 182.3734	Est. Peak Flow Through Channel STA. 0.0000	Max. Velocity at Headworks (FPS) STA. 182.3734	Max. Velocity at Outlet (FPS) STA. 0.0000	Calculated Total Hydrograph Volume at Headworks (AF)	EST. Total Volume Retained in Channel (AF)	EST. Total Volume Conveyed Through Channel (AF)
2-yr, 24-hr	505	505	12.42	16.26	79.74	6.993	72.75
5-yr, 24-hr	731	731	12.9	17.42	166.15	6.993	159.16
10-yr, 24-hr	1,028	1,028	13.02	18.38	356.41	6.993	349.42
20-yr, 24-hr	1,206	1,206	13.36	18.79	450.22	6.993	443.23
100-yr, 24-hr	1,742	1,742	14.8	19.64	786.74	6.993	779.75

Source: Joseph E. Bonadiman & Associates Inc. 2012

TABLE 5
POST-PROJECT HYDROLOGIC RETENTION

Pond No.	Retention (CF)	Retention (AF)
1	2,936	0.067
2	745	0.017
3	281	0.006
4	275	0.006
5	138	0.003
6	61	0.001
7	182	0.004
8	283	0.006
9	2,842	0.065
TOTAL	7,743	0.178

Source: Joseph E. Bonadiman & Associates Inc. 2012

The hydrology and hydraulics report also determined that while the pre-project channel has a conveyance capacity of approximately 1,280 cubic feet per second, the peak calculated 100-year flow for the tributary watershed is 1,742 cubic feet per second. During peak rainfall events, the remaining 462 cubic feet per second is anticipated to overflow to the east, resulting in 775.01 acre-feet of the 100-year total runoff of 786.74 acre-feet being conveyed through the pre-project channel and discharged at the existing overflow discharge point.

Table 6 includes a comparison of Tables 3 and 4, revealing the changes in the velocity and volume of water that will be conveyed through the channel during peak rainfall. While the maximum velocity of these events will be increased, the volume of water that will be conveyed from the site will actually be reduced following the implementation of the proposed project. The less than significant increases to water velocity and decreases in water volume within and flowing from the site will reduce the potential for erosion, siltation, flooding, or stormwater volumes. This impact will be less than significant.

TABLE 6
CHANGES IN VELOCITY AND VOLUME OF WATER

Event	Calculated Peak Hydrograph Flow at Headworks (CFS) STA. 182.3734	Est. Peak Flow Through Channel STA. 0.0000	Max. Velocity at Headworks (FPS) STA. 182.3734	Max. Velocity at Outlet (FPS) STA. 0.0000	Calculated Total Hydrograph Volume at Headworks (AF)	EST. Total Volume Conveyed Through Channel (AF)
2-yr, 24-hr	0.00%	0.00%	-20.59%	24.50%	0.00%	-8.77%
5-yr, 24-hr	0.00%	0.00%	-25.48%	18.26%	0.00%	-4.21%
10-yr, 24-hr	0.00%	0.00%	-31.44%	12.90%	0.00%	-1.96%
20-yr, 24-hr	0.00%	0.00%	-32.56%	10.66%	0.00%	-1.55%
100-yr, 24-hr	0.00%	36.09%	-26.44%	13.72%	0.00%	0.61%

Source: Joseph E. Bonadiman & Associates Inc. 2012

- IX f) **Less Than Significant Impact.** The discussion for impacts c through e above demonstrates that the proposed project will not result in significant increases to the runoff volumes on the site.
- IX g) **No Impact.** The creation of housing is not included in the project.
- IX h) **Less Than Significant Impact.** The discussion for impacts c through e above contains the predicted on-site flows of a 100-year rainfall event at the site, both prior to and following the completion of the proposed project. The discussion further reveals that the proposed project will have only a less than significant effect on flow from 100-year flood events.
- IX i) **No Impact...** See response to Questions IX d-f above. In addition, according to the *County of San Bernardino Hazards Overlay Map*, the project site is not located within an inundation area. Therefore, future development on the site would not expose people or structures to a significant hazards as a result of the failure of a levee or dam.
- VIII j) **No Impact.** The project area does not appear on the Tsunami Inundation Maps prepared by the California Department of Conservation, therefore there are no impacts from tsunamis forecasted to occur.

Based on the Hazards Overlay Maps contained in the County of San Bernardino General Plan, the Project site is not located in an area prone to seiche, landslides, soil slips, or slumps. Therefore, the proposed project would have no impact from mudflow.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- X a) **No Impact.** The Project will not physically divide an established community because the project is located within a 3.9 acre site which contains a single-family residence and accessory structures.
- X b) **Less Than Significant Impact With Mitigation Incorporated.** The analysis contained in this Initial Study Checklist addresses the potential conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The riparian corridor located within the proposed project site is subject to the jurisdiction of the US Army Corps of Engineers and the California Department of Fish and Wildlife. Due to this jurisdiction, the proposed project will be submitted for plan check and approval to both agencies prior to the issuance of any permits.

Based on the above and with compliance with Mitigation Measures BIO-1 through BIO-4, the project will not have a significant impact on any of the environmental resources described in this Initial Study Checklist and the project will not be in conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

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XI. MINERAL RESOURCES - Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- 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?

SUBSTANTIATION (Check if project is located within the Mineral Resource Zone Overlay):

XI a-b) **No Impact.** Section 82.17.020 of the Development Code states: "*The MR Overlay shall be applied on the following areas:*

(a) Areas with existing major surface mining activities;

(b) Areas where mining activity is expected to take place in the future; and

(c) Areas adjacent to current or proposed mining activity to prohibit the intrusion of incompatible uses."

The project will not result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state, because there are no major mining activities being conducted on the site; the location and size of the site precludes future mining; and there are no current or proposed mining activities that are located adjacent to the site. In addition, the site the site is not within a Mineral Resource Zone Overlay as described above.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XII. NOISE - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (Check if the project is located in the Noise Hazard Overlay District or is subject to severe noise levels according to the General Plan Noise Element):

XIII. POPULATION AND HOUSING - Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- XIII a) **No Impact.** The project involves improvements to approximately 180 feet of the Kimbark Creek as it traverses the property which include: the removal of trees; rearranging rocks within the existing stream channel to surround existing pools; placing rocks from adjacent uplands on the existing stream crossing at the southern property boundary; and the construction of an approximate 16-foot stone arched footbridge spanning the wash. As such, the project will not result in any population growth.
- XIII b) **No Impact.** The existing residential unit on the site will remain. Therefore there will be no displacement of a substantial numbers of existing housing units
- XIII c) **No Impact.** The existing residential unit on the site will remain. Therefore there will be no displacement of a substantial numbers of people.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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XIV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

XIV a) **No Impact.** The project site is fully developed with a single-family home. The addition of landscaping improvements will not require additional services from any public agency.

Therefore, no significant adverse impacts are identified or anticipated for Public Services and no mitigation measures are required.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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XV. RECREATION

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

- XV a) **No Impact.** The project will not 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, because it only involves the installation of landscaping and hardscape on a residential property.
- XV b) **No Impact.** The Project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment, because it only involves the installation of landscaping and hardscape on a residential property.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
XVI. TRANSPORTATION/TRAFFIC - 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

XVa-f) **No Impact.** The project involves improvements to approximately 180 feet of the Kimbark Creek as it traverses the property which include: the removal of trees; rearranging rocks within the existing stream channel to surround existing pools; placing rocks from adjacent uplands on the existing stream crossing at the southern property boundary; and the construction of an approximate 16-foot stone arched footbridge

James & Susan Enkosky

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spanning the wash. As such, the project will have no impact on transportation/traffic issues.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The project involves improvements to approximately 180 feet of the Kimbark Creek as it traverses the property which include: the removal of trees; rearranging rocks within the existing stream channel to surround existing pools; placing rocks from adjacent uplands on the existing stream crossing at the southern property boundary; and the construction of an approximate 16-foot stone arched footbridge spanning the wash. As such, the project will have no impact on utilities and service systems.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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XVII. MANDATORY FINDINGS OF SIGNIFICANCE:

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

SUBSTANTIATION

XVII a) **Less Than Significant Impact With Mitigation Incorporated:** Based on the analysis contained in this Initial Study, impacts to Aesthetics, Agriculture and Forestry Resources, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, and Transportation and Traffic, are considered as having a less than significant or no impact on the environment.

The project may potentially impact the habitat of a local wildlife species. The project could also potentially reduce or restrict the range of rare or endangered plants or animals believed to inhabit the area. To reduce these impacts, this document recommends the implementation of Mitigation Measures BIO-1 through BIO-4. The implementation of these mitigation measures will reduce these potential impacts to less than significant.

Therefore, the project does not have the potential to significantly degrade the overall quality of the region's environment, or 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.

- XVII b) **Less Than Significant impact:** The analysis in this Initial Study Checklist demonstrates that the project is in compliance with all applicable regional plans including but not limited to, water quality control plan, air quality maintenance plan, and plans or regulations for the reduction of greenhouse gas emissions. Compliance with these regional plans serves to reduce impacts on a regional basis so that the project will not produce impacts, that considered with the effects of other past, present, and probable future projects, will be cumulatively considerable.
- XVII c) **Less Than Significant Impact:** As discussed this Initial Study Checklist, the project would not expose persons to adverse impacts related to Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality Land Use and Planning, Noise, Population and Housing, or Transportation/Traffic Hazards. These impacts were identified to have no impact or a less than significant impact.

XVIII. MITIGATION MEASURES

(Any mitigation measures, which are not 'self-monitoring', shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

SELF MONITORING MITIGATION MEASURES: (Condition compliance will be verified by existing procedure): None

Mitigation Measures

Mitigation Measure BIO-1:

Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

"The project applicant shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during nesting season, then preconstruction surveys for nesting raptors and migratory birds shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the

potential to disturb or otherwise harm nesting birds.

If active nest(s) are identified during the preconstruction survey, then a qualified biologist shall monitor the nest to determine when the young have fledged. Monthly monitoring reports, documenting nest status, will be submitted to the County Planning Department until the nest is deemed inactive. The biological monitor shall have the authority to cease construction if there is any sign of distress to a raptor or migratory bird. Reference to this requirement and the Migratory Bird Treaty Act shall be included in the construction specifications.”

Mitigation Measure BIO-2:

Note-Biological Resources. The following CDP notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“The project applicant shall conduct a rare plant survey on the undisturbed portions of the site prior to initiation of land clearing activities. Surveys shall be conducted during the blooming period for Plummer’s mariposa lily (May–July), Parry’s spineflower (April–June), and short-joint beavertail (April–August). If individuals are identified, exclusionary fencing will be established around the plants to minimized damage to the plant.

- 1. Surveys shall be conducted in accordance with the Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (CDFG 2000).***
- 2. If any federally or state-listed, CNPS Rare Plant Rank 1 or 2 plant species are found during the surveys, specimens shall be avoided to the extent possible. Avoidance measures shall include fencing of the population(s) before construction, exclusion of project activities from the fenced-off areas (no ingress of personnel or equipment), and construction monitoring by a qualified biologist. Avoidance areas shall be identified on project plans.***
- 3. If sensitive plants cannot be avoided, the following mitigation measures shall be applied:***

Before the approval of grading plans or any ground-breaking activity within the project site, the project applicant shall submit a mitigation plan concurrently to the CDFW and the USFWS (if appropriate) for review and comment. The plan shall include mitigation measures for the population(s) to be directly affected. Minimum standards for mitigation are:

- Implementation of a program to transplant, salvage, cultivate, or reestablish the species either within the project site or at an off-site***

preserve to be protected in perpetuity. The off-site preserve shall include similar soil, climate, and associated plant species as is currently present at the site. This location will be protected in perpetuity under a conservation easement and managed appropriately to ensure the transplantation is a success. If on-site preservation is determined to be feasible, a conservation easement shall be placed over project open space areas to preserve the mitigation areas in perpetuity.

- *Alternatively, replacement credits may be purchased by the project applicant at an approved mitigation bank should such credits be available.*

Mitigation Measure BIO-3:

Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“As part of the 1602 Streambed Alteration Agreement, the project applicant shall prepare and implement a vegetation mitigation and monitoring plan for disturbed vegetation. Ratios for mitigation will be determined by the CDFG at a minimum ratio of 1:1 to ensure no net loss of vegetation within CDFW jurisdiction.”

Mitigation Measure BIO-4:

Note-Biological Resources. The following notes shall be listed on the Grading Plan prior to the issuance of a grading permit:

“A formal jurisdictional delineation shall be conducted for areas that will be permanently or temporarily impacted by the proposed project. If waters of the State and of the United States cannot be avoided, the project applicant shall apply for a CWA Section 404 permit from the USACE, a Section 401 permit from the Santa Ana RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW. These permits shall be obtained prior to issuance of grading permits and implementation of the proposed project.

The project applicant shall ensure that the project will result in no net loss of waters of the State and of the United States by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits and 1602 Streambed Alteration Agreement.

Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities

(these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants); and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project proponent/permit applicant retains responsibility for the implementation and success of the mitigation project.”

Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

GENERAL REFERENCES:

CEQA Guidelines, Appendix G

County of San Bernardino Development Code, 2007.

County of San Bernardino General Plan, 2007.

County of San Bernardino Hazard Overlay Maps.

Department of Toxic Substances Control ENVIRSTOR website accessed August, 2013.

State of California, Department of Conservation, Division of Land Resource Protection,
Farmland Mapping and Monitoring Program.

California Department of Conservation. 2012a. California Geologic Survey. Alquist-Priolo
Earthquake Fault Zone Maps. Accessed October 6, 2012.
<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/Index.aspx>

California Geological Survey. Liquefaction Zones. Accessed October 6, 2012.
<http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>

Land Resource Protection, Farmland Mapping & Monitoring Program. Accessed October 4,
2012. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>

California Office of Historic Preservation. 2012. California Register of Historical Places.
Accessed October 6, 2012.
<http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=36>

Caltrans (California Department of Transportation). 2012. California Scenic Highway Program.
Accessed October 4, 2012.
http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm

CDFG (California Department of Fish and Game). 2000. *Guidelines for Assessing the Effects of
Proposed Projects on Rare, Threatened, and Endangered Plants and Natural
Communities.*

_____. 2004. *Species Accounts – Reptiles.*

Center for Plant Conservation. 2012. *National Collection of Endangered Plants.* Accessed
June 22, 2012. [http://www.centerforplantconservation.org/Collection
/NationalCollection.asp](http://www.centerforplantconservation.org/Collection/NationalCollection.asp).

James & Susan Enkosky
Project No: AP20120024
August 8, 2013

EPA (US Environmental Protection Agency). 2012. National Priorities List; State of California Cortese List. Accessed October 8, 2012.
<http://www.calepa.ca.gov/SiteCleanup/CorteseList/>

IUCN (International Union for Conservation of Nature and Natural Resources). 2012. *The IUCN Red List of Threatened Species. Version 2012.2*. Accessed June 22, 2012.
<http://www.iucnredlist.org>.

Mock, P. 2004. "California Gnatcatcher (*Poliophtila californica*).” In *The Coastal Scrub and Chaparral Bird Conservation Plan: A Strategy for Protecting and Managing Coastal Scrub and Chaparral Habitats and Associated Birds in California*. California Partners in Flight.
<http://www.prbo.org/calpif/htmldocs/scrub.html>.

Nafis, Gary. 2012. *California Herps: A Guide to Amphibians and Reptiles of California*. Accessed June 22, 2012. <http://www.californiaherps.com/index.html>.

National Park Service. 2012. National Register of Historic Places. Accessed October 6, 2012.
<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>

USFWS (US Fish and Wildlife Service). 1998. *Draft Recovery Plan for the Least Bell's Vireo*. USFWS, Portland, Oregon.

———. 2002a. *Recovery Plan for the California Red-Legged Frog*. Portland, OR: USFWS.

———. 2002b. *Southwestern Willow Flycatcher Recovery Plan*. Albuquerque, NM: USFWS.

———. 2009a. *Arroyo Toad 5-Year Review: Summary and Evaluation*. Ventura, CA: USFWS.

———. 2009b. *San Bernardino Kangaroo Rat 5-Year Review: Summary and Evaluation*. USFWS, Carlsbad, California.

———. 2010. *Coastal California Gnatcatcher 5-Year Review: Summary and Evaluation*. Carlsbad, CA: USFWS.

———. 2012. *Recovery Outline for Santa Ana Sucker*. Carlsbad, CA: USFWS.

PROJECT SPECIFIC REFERENCES:

Joseph E. Bonadiman & Associates Inc. 2012. *Revised Hydrology & Hydraulics Report*.