

Biological Technical Report for the Tran Monastery Project

August 15, 2017

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I certify that the information in this survey report and attached exhibits fully and accurately represent my work.



SDC PDS RCVD 01-25-19
MUP14-010

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Tran Monastery Biological Technical Report

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1.0 INTRODUCTION

This report describes existing biological conditions on the Tran Monastery project site and provides the County of San Diego (County) and project applicant with information necessary to assess impacts to biological resources under the California Environmental Quality Act (CEQA) and the County's Draft North County Multiple Species Conservation Program (MSCP) Subarea Plan.

1.1 PROJECT LOCATION

The site is located at intersection of Vista Avenue and North Ash Street (Figures 1 and 2) within a portion of the County that is surrounded by the City of Escondido. The project site is within Section 3, Township 12 South, Range 2 West of the U.S. Geological Survey 7.5-minute Valley Center quadrangle. The Assessor Parcel Number for the project site is 227-010-57.

1.2 PROJECT DESCRIPTION

The project involves a Major Use Permit (MOU) and the construction of a monastery building along with additional facilities and parking areas within previously graded areas on the monastery site. Off-site roadway improvements also would occur on North Ash Street.

1.3 PHYSICAL DESCRIPTION AND LAND USE

The project site is located on the north easterly facing slope of a hill. The northern portion of the site is developed with the existing Phap Vuong Monastery. The majority of the remainder of the site was previously used as an orchard and is currently disturbed. The site is bounded by Vista Avenue to the north and North Ash Street to the East. Residential and agricultural uses surround the site. Soils on site consist of Las Posas Fine Sandy Loam and Fallbrook - Vista Sandy Loam (Bowman 1973). On-site elevations range from approximately 750 feet in the northwest corner to 850 feet in the center of the site.

2.0 METHODS

2.1 LITERATURE REVIEW

Prior to conducting biological field surveys, searches of the California Natural Diversity Database (CNDDB) and the County's Draft North County MSCP Subarea Plan were conducted for information regarding sensitive species known to occur within the vicinity of the site.

2.2 BIOLOGICAL SURVEYS

Fieldwork on the site includes a Stephens' kangaroo rat (*Dipodomys stephensi*; SKR) habitat assessment, vegetation mapping, rare plant surveys, and a general biological assessment (Table 1). Incidental plant and animal observations were noted during each visit. The results of the SKR assessment are included in Appendix A.

Table 1 SURVEY INFORMATION				
DATE	START/STOP TIMES	PERSONNEL	SURVEY TYPE	WEATHER CONDITIONS
12/30/13	0900-1400	Philippe Vergne	SKR Habitat Assessment	Sky cover clear, Wind 0-5 mph, 65-70°F
1/5/14	1415-1630	Greg Mason	Vegetation Mapping and General Biology	Sky cover clear, Wind 0-3 mph, 76-75°F
5/22/14	1230-1600	Lee Ripma	Spring Rare Plant Survey	Overcast Wind 0-1 mph 64-66°F
6/25/14	1600-1705	Lee Ripma	Summer Rare Plant Survey	Sky cover clear, Wind 2-4 mph, 80-81°F

2.2.1 Vegetation Mapping

General biological surveys and vegetation mapping were conducted by Alden Environmental, Inc. in January, 2014. The site was surveyed on foot with the aid of binoculars where necessary. Vegetation communities were mapped according to Holland (1986) or Oberbauer (2008) classifications. Plant and animal species detected on site were recorded during fieldwork conducted on site. In addition, a review of historical aerial photographs available from Google Earth was conducted to determine the vegetation that occurred on site prior to the clearing for the parking area. Based on the Google Earth aerial photography, the parking area was installed between August 4, 2004 and August 26, 2005. The parking area is clearly visible in the 2005 aerial photo, but not in the 2004 aerial. The 2004 aerial photograph was therefore used to forensically map the vegetation occurring on site prior to clearing for the parking area. This mapping is somewhat generalized as it is based entirely on aerial photograph interpretation.

2.2.2 Stephens' Kangaroo Rat

A literature review and records check was conducted by SKR-permitted biologist Philippe Vergne (TE068072-3) for known SKR presence in the vicinity of the site. Following the research, a phase I SKR habitat evaluation of the project area was conducted. The field survey provided information on the existing conditions on site and the potential for the SKR to be present. The evaluation was conducted by walking transects over all suitable/potential SKR habitat on the property. SKR sign searched for included burrows, tail drags, scat, and tracks.

2.2.3 Jurisdictional Features

During the site visit to map vegetation, the site also was inspected for wetland/riparian features that could be considered jurisdictional and regulated by the County (per the resource Protection Ordinance; RPO), U.S. Army Corps of Engineers (Corps), California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB).

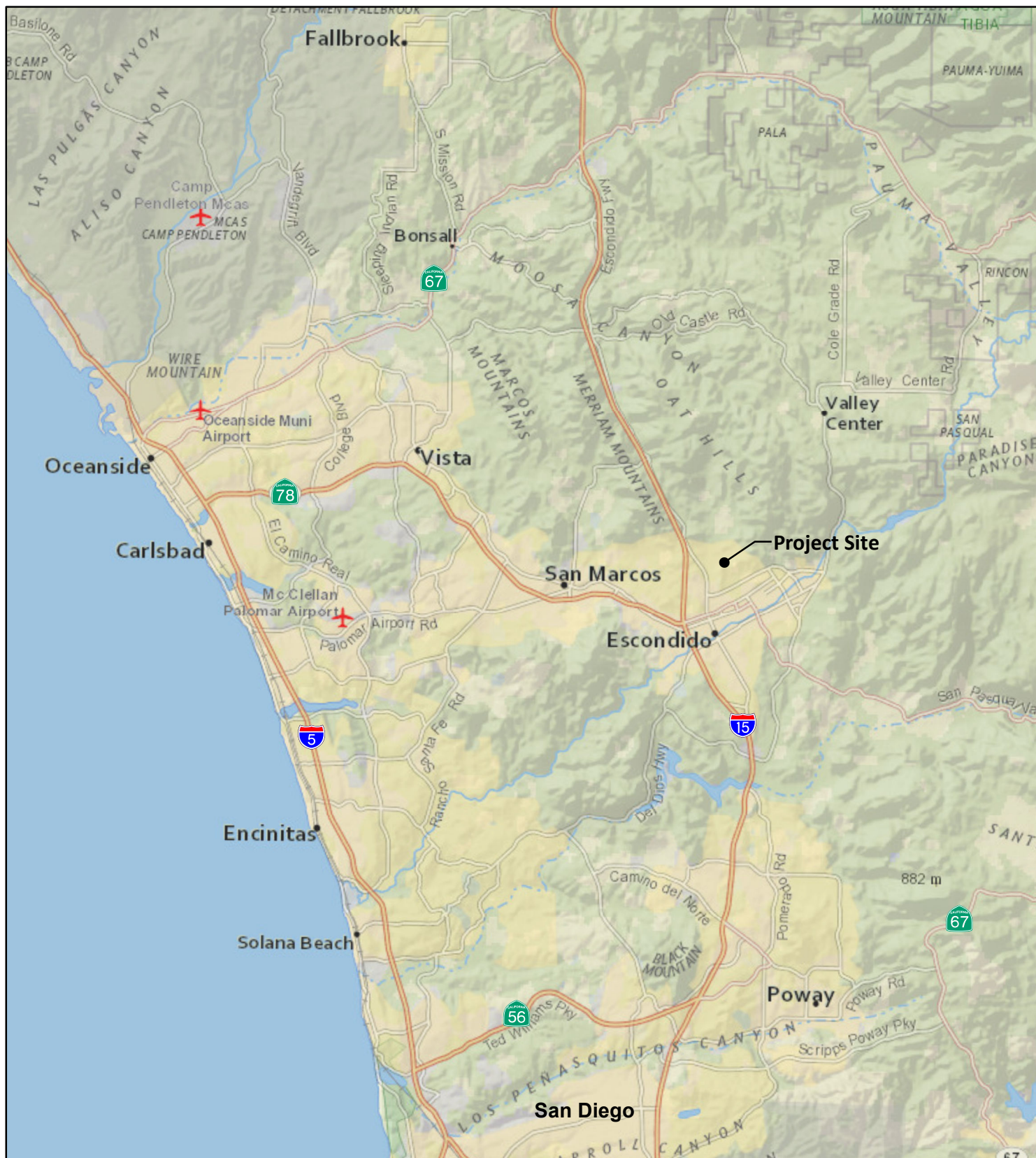
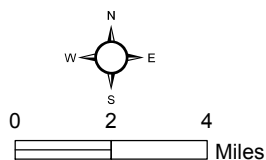


Figure 1

Regional Location

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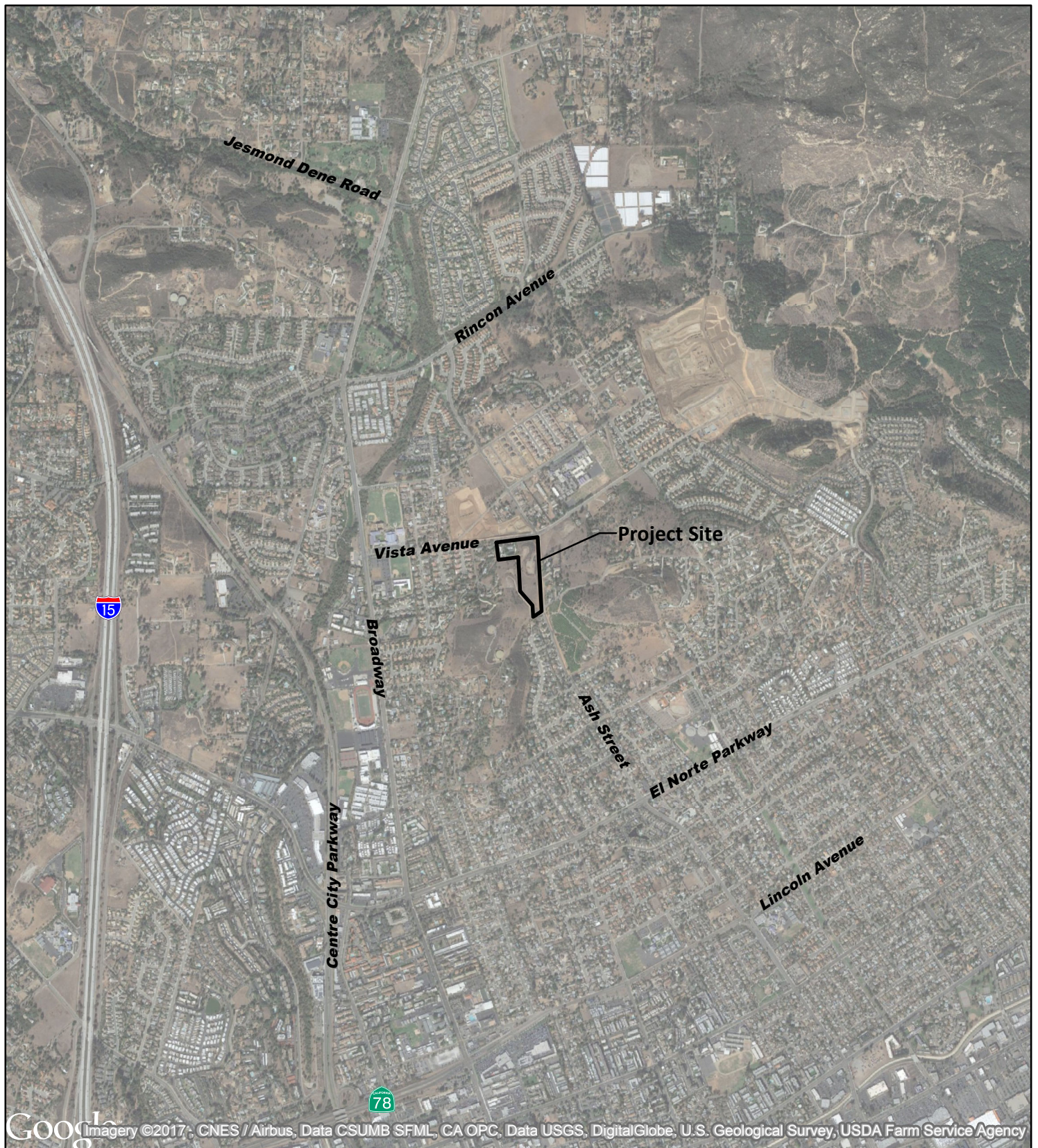
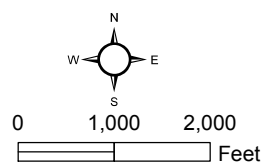


Figure 2

Project Location

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2.2.4 Rare Plant Surveys

Two rare plant surveys were conducted on the site in the spring and summer of 2014 to identify potentially occurring sensitive plant species.

2.3 SURVEY LIMITATIONS

Few survey limitations exist for the study area. The site visits were conducted during daylight hours; therefore, the presence of nocturnal animals such as coyotes (*Canis latrans*), raccoons (*Procyon lotor*), and rodents could be determined only by indirect sign (tracks, scat, or burrows). A complete list of these species would require night surveys and trapping, but is not warranted because potential to occur and the relative sensitivity of animals that might be detected are both low.

2.4 NOMENCLATURE

Nomenclature used in this report follows the conventions used in the County's Guidelines for Determining Significance for Biological Resources (County 2010). Vegetation community classifications follow Holland (1986) and Oberbauer (2008); plant names follow Baldwin, ed. (2012). Sensitive plant status follows CNPS (2012) and CDFG (2012). Animal nomenclature is taken from Crother (2001) for amphibians and reptiles, American Ornithologists' Union (2009) for birds, and Baker et al. (2003) for mammals. Sensitive animal status follows CDFG (2011).

3.0 RESULTS

3.1 VEGETATION COMMUNITIES

Two sensitive vegetation communities (Diegan coastal sage scrub and non-native grassland) occur on site (Table 2). Developed, ornamental, and disturbed areas also occur. Figures 3 and 4 present the vegetation mapping in 2004 and 2017, respectively.

Table 2		
EXISTING VEGETATION COMMUNITIES¹		
Community	2004²	2017
Diegan coastal sage scrub-disturbed (32520 ³)	1.8	1.2
Non-native grassland (42210)	1.2	0.5
Developed/ Ornamental (12000)	2.0	3.9
Disturbed Habitat (11300)	1.9	4.0
Orchard (18100)	2.8	-
TOTAL	9.6	9.6

¹Rounded to the nearest 0.1 acre

²Based on aerial interpretation of 2004 aerial imagery

³Holland code number

3.1.1 Diegan Coastal Sage Scrub-Disturbed (32520)

In 2004 approximately 1.8 acres of disturbed coastal sage scrub habitat occurred on site (Figure 3). The current amount of this habitat on site is 1.2 acres (Figure 4). Diegan coastal sage scrub is a sensitive vegetation community. It occupies xeric (dry) sites characterized by shallow soils. Coastal sage scrub is dominated by subshrubs whose leaves abscise during the summer and may be replaced by a lesser amount of small leaves. This adaptation allows these species to better withstand the prolonged dry period in the summer and fall.

Diegan coastal sage scrub on site is disturbed and occurs in several patches adjacent to the existing disturbed and developed areas (Figures 3 and 4). Predominant plant species in this community on site include California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Coastal sage scrub is considered a sensitive habitat by the County, CDFW, and USFWS. Many species are dependent upon coastal sage scrub, including the federal listed threatened coastal California gnatcatcher (*Polioptila californica californica*; CAGN). This habitat on site is sparse, fragmented, and surrounded by developed and agricultural land. Given the small amount of habitat on site and the lack of adjacent suitable habitat, this CAGN is not anticipated to occur on site.

3.1.2 Non-native Grassland (42210)

Non-native (annual) grassland is a sensitive vegetation community. It is characterized by a dense to sparse cover of exotic annual grasses and is often associated with numerous species of showy-flowered native annual forbs (Holland 1986). Characteristic species within this vegetation community on site include wild oats (*Avena* spp.), foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass (*B. diandrus*), filaree (*Erodium* spp.), and mustard (*Brassica nigra*). Although not as sensitive as native grasslands, non-native grasslands can support many of the same plant and animal species. Non-native grasslands also are valuable as habitat for native rodents and foraging habitat for sensitive raptor species. Approximately 1.2 acres of non-native grassland occurred on the site in 2004 (Figure 3). Currently, the site supports approximately 0.5 acre of non-native grassland (Figure 4).

3.1.3 Developed/Ornamental Areas (12000)

Developed and ornamental areas consist of monastery facilities, landscaping, and paved areas. Approximately 2.0 acres developed/ornamental areas occurred on the site in 2004 (Figure 3). Currently, the site supports approximately 3.9 acres of developed and ornamental areas (Figure 4). These areas are not considered sensitive.

3.1.4 Disturbed Habitat (11300)

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by prior development or where agricultural lands have been abandoned. Disturbed habitat is generally bare or dominated by non-native weedy species that adapt to frequent disturbance or consists of dirt trails and roads. Species present within this habitat on site include mustard, star thistle (*Centaurea melitensis*), and Russian thistle (*Salsola tragus*). Approximately 1.9 acres disturbed habitat occurred on the site in 2004 (Figure 3).

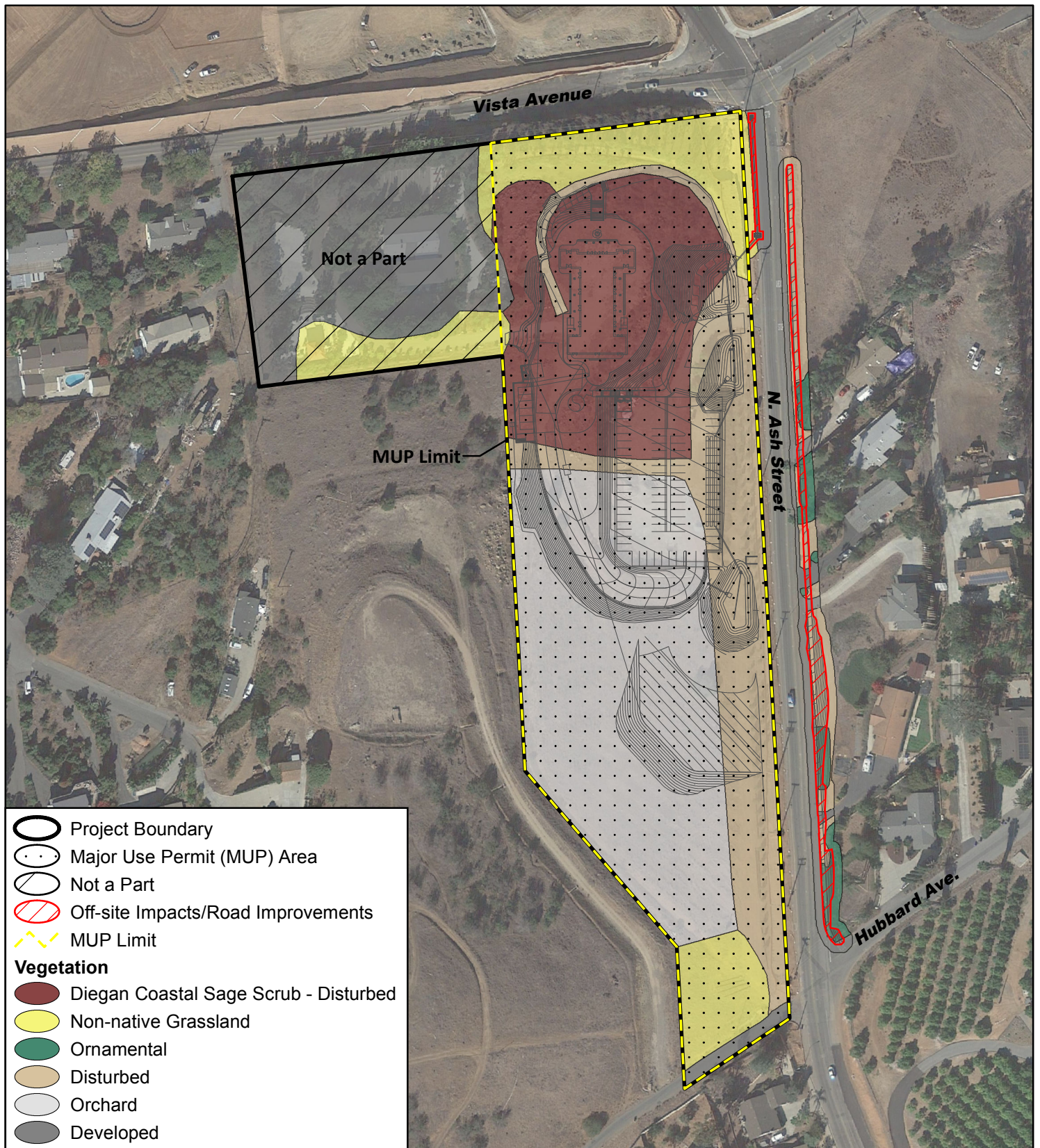
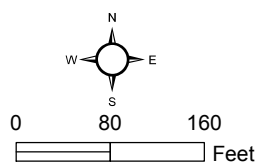


Figure 3

Vegetation/Impacts

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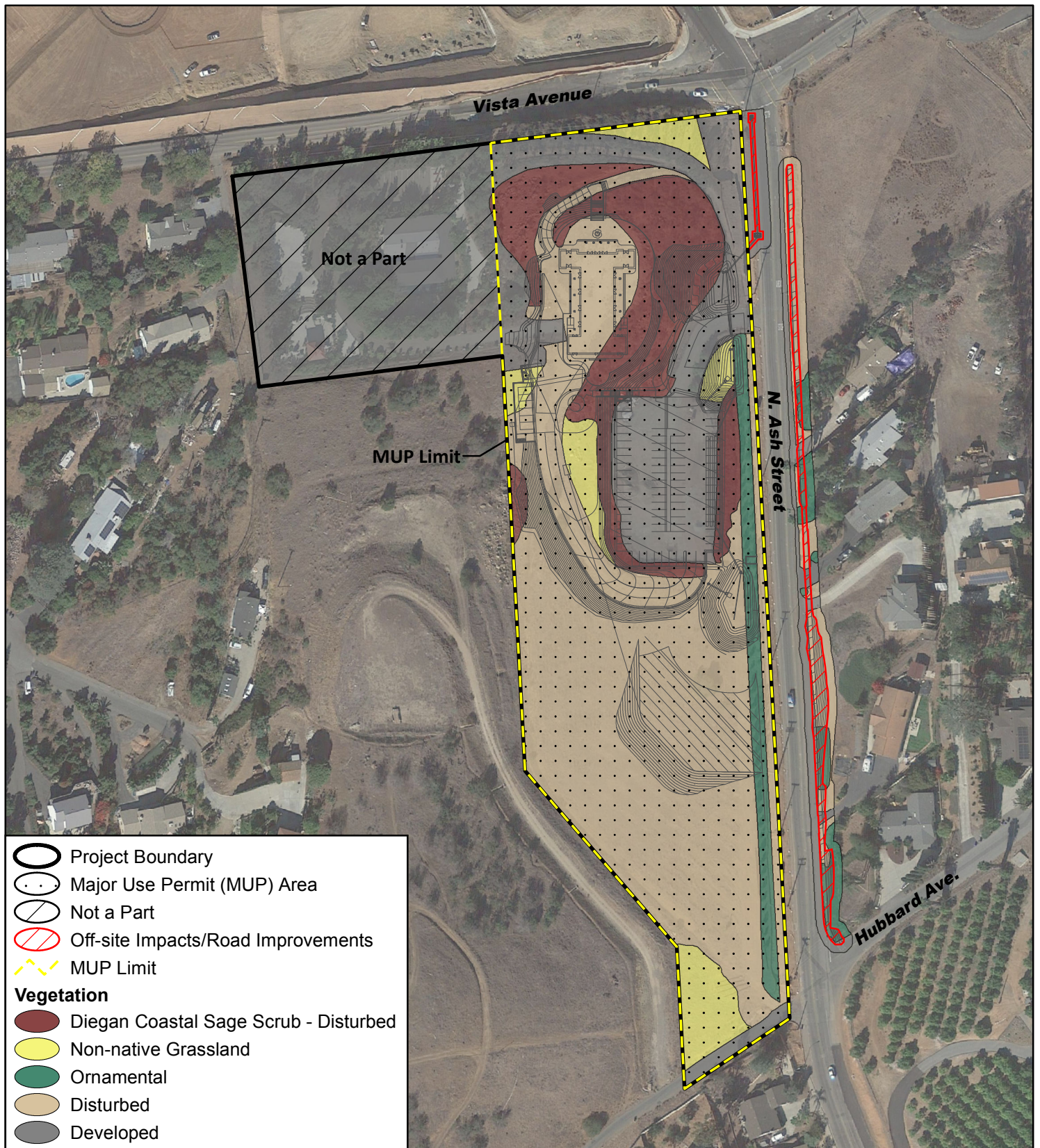
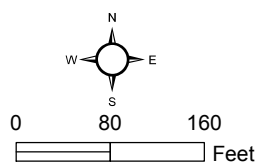


Figure 4

Current Vegetation Mapping

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Currently, the site supports approximately 4.0 acres of disturbed habitat (Figure 4). These areas are not considered sensitive.

3.1.5 Orchard (11300)

An approximately 2.8 acre orchard is visible in the 2004 aerial photograph of the site (Figure 3). This area is no longer being used as an orchard and is currently mapped as non-native grassland and disturbed areas (Figure 4). Orchards are not considered to be sensitive habitat.

3.2 PLANT SPECIES OBSERVED

A list of plant species observed on site is presented in Appendix B.

3.3 ANIMAL SPECIES OBSERVED OR DETECTED

A list of animal species observed or detected on site is presented in Appendix C.

3.4 STEPHENS' KANGAROO RAT

The focused SKR assessment (Appendix A) did not result in the identification of any SKR or sign of kangaroo rat presence on the project site. The SKR is not currently present on the property or on adjacent properties. No impacts to SKR or their habitat will occur due to project implementation.

3.5 JURISDICTIONAL FEATURES

The site does not support drainages or wetland/riparian features that would be considered jurisdictional by the County (RPO), Corps, CDFW, or RWQCB.

4.0 SENSITIVE RESOURCES

Sensitive resources are those defined as (1) habitat areas or vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife; and (2) species that have been given special recognition by federal, state, or local government agencies and organizations due to limited, declining, or threatened populations.

4.1 SENSITIVE VEGETATION COMMUNITIES

Sensitive vegetation communities are considered rare within the region or sensitive by the County, CDFW, and the USFWS. These communities in any form are considered sensitive because they have been historically depleted, are naturally uncommon, or support sensitive species. The study area supports two sensitive vegetation communities: Diegan coastal sage scrub and non-native grassland. Disturbed, developed, and ornamental areas are not considered sensitive.

4.2 SENSITIVE PLANT SPECIES

No sensitive plant species were identified as occurring on or adjacent to the site in the CNDDDB database. Additionally, no sensitive plant species were observed during the field visits. Based on the results of the database search and the disturbed/developed nature of the site, no sensitive plant species are anticipated to occur on the site.

Sensitive plant species not observed but with potential to occur are presented in Appendix D. An explanation of status codes is provided in Appendix E.

4.3 SENSITIVE ANIMAL SPECIES

No sensitive animal species were observed or detected within the study area during biological surveys. There is some potential for the CAGN to occur within the coastal sage scrub habitat on site; however, given the small patch size and disturbed nature of this habitat on site, the CAGN is not anticipated to occur and surveys are not recommended. Additionally, the project must confer with the USFWS as part of the County's Habitat Loss Permit (HLP) ordinance for impacts to DCSS habitat.

The site does have suitable nesting (eucalyptus trees) and foraging habitat (non-native grassland) for raptor species such as the red-tailed hawk (*Buteo jamaicensis*).

Sensitive animal species not observed but with potential to occur are presented in Appendix F.

5.0 REGIONAL AND REGULATORY CONTEXT

Biological resources within the project site are subject to regulatory control by the federal government, State of California, and the County. The federal government administers non-marine plant and wildlife related regulations through the USFWS, while Waters of the U.S. (wetlands and non-wetland waters) are administered by the Corps. California law regarding wetland, water-related, and wildlife issues is administered by the CDFW. The County is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances.

5.1 FEDERAL GOVERNMENT

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered take under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the Clean Water Act. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of all Waters of the U.S. Permitting for projects filling Waters of the U.S. (including wetlands) is overseen by the Corps under Section 404 of the Clean Water Act. There are no federal jurisdictional features on site; therefore, a Clean Water Act permit would not be required.

The Migratory Bird Treaty Act (MBTA; 16 U.S. Code Sections 703-711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds. The MBTA regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations Section 10.13. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a “take.” The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by the USFWS. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

5.2 STATE OF CALIFORNIA

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. There are no state listed species on site; therefore, there is no need to pursue authorization per the California ESA.

The California Fish and Game Code (Sections 1600 through 1603) requires a CDFW agreement for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement. A 1602 Streambed Alteration Agreement would be required for the proposed project if impacts occur to CDFW jurisdictional areas. There are no jurisdictional features on site; therefore, no agreement with the CDFW is required.

5.3 COUNTY OF SAN DIEGO

The North County MSCP Subarea Plan is still in draft form and has not yet been implemented by the County. However, the proposed requirements and policies in the draft plan likely would be implemented by the County for this project. The County also will implement the County of San Diego Biology Guidelines and Report Format and Content Requirements as well as the requirements in the RPO. The project site is not located within an area mapped as a Pre-Approved Mitigation Area (PAMA) in the Draft North County MSCP Subarea Plan. Of the communities identified on site, the Diegan coastal sage scrub and non-native grassland habitats would be considered sensitive and require mitigation for impacts. Additionally, the County is the lead agency under the CEQA.

Because the project is not within an adopted NCCP area and would impact Diegan coastal sage scrub habitat, it will require a Habitat Loss Permit (HLP) from the County. The HLP will require CDFW and USFWS concurrence and provide for allocation of a portion of the County's 5 percent take allowance of Diegan coastal sage scrub. The project proponent will be responsible for submitting all required application materials to obtain an HLP. If the North County MSCP is adopted prior to project approval the HLP permit would not be required.

6.0 PROJECT IMPACTS

Project impacts may be considered either direct or indirect. A direct impact occurs when the primary effects of the project replace existing habitat with graded or developed areas. An indirect impact consists of secondary effects of a project, including habitat insularization, drainage/water quality, lighting, noise, roadkill, exotic plant species, raptor foraging/nesting, nuisance animal species, and human intrusion. The magnitude of an indirect impact may be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

6.1 DIRECT IMPACTS

6.1.1 Vegetation Communities

Impacts to vegetation communities are based on the 2004 aerial photography vegetation mapping, prior to the parking area clearing, and do not reflect current site conditions. Approximately 7.3 acres would be impacted (Figure 3; Table 3). This includes the entire MUP area as well as the off-site road improvements. The impacted areas include disturbed Diegan coastal sage scrub, non-native grassland, disturbed habitat, and developed area.

Table 3 IMPACTS TO VEGETATION COMMUNITIES^{1,2}	
Vegetation Communities	Area
Diegan coastal sage scrub-disturbed (32520)	1.8
Non-native grassland (42210)	0.8
Disturbed habitat (11300)	1.7
Developed/ Ornamental (12000)	0.2
Orchard (11300)	2.8
TOTAL	7.3

¹Based on the 2004 vegetation mapping

²Includes the entire MUP area as well as the off-site road improvements

Sensitive Communities

Diegan Coastal Sage Scrub-disturbed (32520)

Approximately 1.8 acres of disturbed Diegan coastal sage scrub would be impacted upon implementation of the proposed project and MUP(Figure 3).

Non-native Grassland (42210)

Approximately 0.8 acre of non-native grassland would be impacted upon implementation of the proposed project and MUP (Figure 3).

Other Areas

Approximately 4.7 acres of non-sensitive disturbed, developed, ornamental, and orchard areas also would be impacted upon implementation of the proposed project and MUP (Figure 3).

6.1.2 Sensitive Plant Species

Implementation of the proposed project is not anticipated to impact any sensitive plant species.

6.1.3 Sensitive Animal Species

A small amount of disturbed Diegan coastal sage scrub habitat would be impacted by the project. This habitat type is known to support the listed CAGN; however, due to the small size and fragmented nature of this habitat on site, this species is not anticipated to occur.

Impacts to raptor foraging habitat would occur through the loss of non-native grassland and other upland habitats. Direct impacts to other sensitive animal species would not be considered significant due to their low sensitivity status.

6.1.4 Jurisdictional Features

The project would not result in impacts to any County (RPO), Corps, CDFW, or RWQCB jurisdictional areas.

6.1.5 Wildlife Corridors

The project site is not within or adjacent to any local or regional wildlife corridors. As such, project development would not impact any wildlife corridors.

6.2 INDIRECT IMPACTS

Potential indirect project impacts consist of secondary effects of a project, including habitat insularization, drainage/water quality, lighting, noise, exotic plant species, raptor foraging/nesting, and human intrusion. The project is not adjacent to any areas supporting sensitive biological resources. Given the developed nature of the surrounding area, no indirect impacts would result from the proposed project.

7.0 MITIGATION MEASURES

The following measures are proposed to mitigate for project related impacts.

7.1 MITIGATION FOR DIRECT IMPACTS

7.1.1 Vegetation Communities

The project proponent proposes to mitigate for impacts to 1.8 acres of disturbed Diegan coastal sage scrub at 1:1 ratio and impacts to 0.8 acre of non-native grassland at a 0.5:1 ratio. The resulting 2.2 acre mitigation requirement would be met through habitat preservation, purchase of credits in an approved mitigation bank and/or preservation of suitable habitat off site. The final mitigation would be determined through consultation with the wildlife agencies during the County HLP process.

7.1.2 Coastal California Gnatcatcher

While the DCSS habitat on site is not anticipated to support the CAGN, the habitat is still being mitigated at the same ratio as if it were present. Direct impacts to potential CAGN habitat shall be mitigated through purchase of mitigation credits and/or off site habitat preservation, in accordance with the mitigation measure discussed above in Section 7.1.1. In addition, the USFWS and CDFW will identify specific measures to be implemented for the take of the DCSS habitat and potential CAGN presence on site through the HLP process. It is anticipated that the HLP measures will coincide with the upland habitat mitigation identified in Section 7.1.1 above.

7.1.3 Nesting Birds

To avoid any direct impacts to the CAGN, raptors, and/or any native/migratory birds protected by the MBTA, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the general avian breeding season (February 15 to September 15). If vegetation must be removed during this season, a qualified biologist will conduct a nesting bird survey of potentially suitable nesting vegetation prior to removal. Surveys will be conducted no more than three (3) days prior to scheduled removals. If active nests are identified, the biologist will establish buffers around the vegetation containing the active nest (300 feet for the CAGN and raptors; 100 feet for other non-raptors). The vegetation containing the active nest will not be removed, and no grading will occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within three days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.

7.2 MITIGATION FOR INDIRECT IMPACTS

To mitigate for potential impacts to the CAGN during construction, the following measures shall be required:

- No clearing, grubbing, grading, or other construction activities shall occur within 500 feet of

Diegan coastal sage scrub habitat between March 1 and August 15 (CAGN breeding season) until the following requirements have been met:

A. A qualified biologist (possessing a valid ESA Section 10(a)(1)(A) Recovery Permit) shall survey appropriate habitat (coastal sage scrub) areas within 500 feet of the project footprint and would be subject to construction noise levels exceeding 60 dB hourly average for the presence of the CAGN. If no appropriate habitat is present then the surveys will not be required. If appropriate habitat is present, gnatcatcher surveys shall be conducted pursuant to USFWS protocol survey guidelines within the breeding season prior to commencement of any construction. If gnatcatchers are present the following conditions must be met:

I. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the prior to the commencement of construction activities. Prior to commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under supervision of a qualified biologist; or

III. At least two weeks prior to commencement of construction activities and under direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB hourly average at the edge of habitat occupied by the CAGN. Concurrent with commencement of construction activities and construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of occupied habitat area to ensure that noise levels do not exceed 60 dB hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).

* Construction noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity to verify that noise levels at the edge of occupied habitat are maintained below 60 dB hourly average or to the ambient noise level if it already exceeds 60 dB hourly average. If not, other measures shall be implemented in consultation with the biologist, as necessary, to reduce noise levels within occupied habitat to below 60 dB hourly average or to the ambient noise level if it already exceeds 60 dB hourly average. Such measures may include but are not limited to limitations on the placement of construction equipment and the simultaneous use of equipment.

B. If CAGNs are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the County and applicable wildlife agencies, and no mitigation would be required.

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Appendix A

STEPHENS' KANGAROO RAT EVALUATION REPORT

ENVIRA

Aquaculture Fisheries Environmental

P.O. Box 2612, Ramona, California, USA 92065

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Philippe Vergne, a permitted Stephen's (*Dipodomys stephensi*)-SKR biologist (TE068072-3), was contracted by Alden Environmental, Inc. to conduct a phase one evaluation for SKR on the estimated 30 acre proposed Tran Monastery project.

METHODS

A literature review and records check was conducted for sensitive resources within the vicinity of the proposed project. In addition to the literature review, a general field survey of the project area was conducted. The field survey provided information on the existing conditions on the site and the potential for sensitive resources to be present. A phase one walk-over of the site was conducted by walking transects over all suitable/potential kangaroo rat habitat on the property. Kangaroo rat sign looked for included burrows, tail drags, scat, and tracks.

LITERATURE REVIEW

A literature review was conducted prior to the trapping effort. This included a review of standard field guides and texts on sensitive and non-sensitive biological resources, as well as the following sources:

- List of sensitive biological resources provided by the California Natural Diversity Data Base (CNDDB);
- Biological resources reports for the project site and adjacent properties; and
- General texts and other documents identifying potential resources on the site.

All technical information reviewed is included in the References section of this document.

The Dulzura (*Dipodomys simulans*) and the Stephens kangaroo rat (*Dipodomys stephensi*) have overlapping ranges. Dulzura kangaroo rats are known to occasionally inhabit open grasslands more characteristic of SKR. SKR are infrequently known to inhabit areas of denser vegetation. Therefore, trapping is often the only definitive method of confirming the absence or presence, distribution, and abundance of SKR in areas where they are sympatric with other kangaroo rat species, or where trace sign is found.

Stephens Kangaroo Rat

The Stephens kangaroo rat (SKR) prefers open areas with sparse perennial cover (Lackey 1967, Bleich 1977, Thomas 1975). They occur in areas of loose soil where the soil depth is at least 0.5 meters (Price and Endo 1989). SKR will also inhabit disturbed areas such as fallow fields by using the burrows of other rodents, including pocket gophers (*Thomomys bottae*) (Bleich 1977) and the Beechey ground squirrel (*Spermophilus beecheyi*) (O'Farrell 1989).

Like all kangaroo rats, the SKR is primarily a seed eater, feeding on the seeds of both annual and shrub species. It also feeds on green vegetation and insects when these are available. Being primarily a dry biome species, kangaroo rats obtain nearly all of their water from the food they eat, and can subsist indefinitely on water extracted from dry seeds. They forage in open ground and underneath shrubs. Burrows are dug in loose soil.

The closest SKR populations to the proposed project are located in the Fallbrook Airport Area and at the Naval Weapon Storage Center facility in Fallbrook. Other populations occur on Camp Pendleton, in Valley Center and in Ramona California.

PHASE ONE BIOLOGICAL SURVEYS

A reconnaissance-level phase one pedestrian survey was conducted on the property on December 30 of 2013, from 9AM to 2 PM to assess suitable habitat for SKR resources within the project boundaries. Notes were taken during the surveys of all plant and wildlife species observed. Observations of wildlife species included scat, trails, tracks, burrows, nests, calls, and visual observation. In addition, site characteristics such as soils, topography, the condition of the plant communities, and evidence of human use of the site were noted.

Based on the available information and site conditions, there was a moderate probability that SKR could occur on the project site. SKR were known to occupy similar habitat in several areas in San Diego County.

Topography and Soils

The majority of the site consists of gently to mid sloping terrain and small hills located above the existing monastery.

The sandy and clay loam soils on site are mostly suitable for SKR occupancy.

Surrounding Land Uses

Surrounding land are open space and rural housing with mostly disturbed annual grasslands and sparse remnant or emergent coastal sage scrub.

Plant Communities

There are two plant communities on the property. In decreasing order of importance they are: disturbed annual grasslands and sparse sage scrub.

Disturbed Annual/Ruderal Grassland

The disturbed annual grassland plant community is composed of annual grasses, weeds and sparse emergent scrub. Plant species within this community consists of bromes such as red brome (*Bromus madritensis*) and ripgut grass (*Bromus diandrus*), herbaceous annuals such as red-stemmed filaree (*Erodium cicutarium*), fiddleneck (*Amsinckia menziesii*), annual sunflower (*Helianthus annuus*), doveweed (*Eremocarpus setigerus*), horehound (*Marrubium vulgare*), western ragweed (*Ambrosia psilostachya*), and short-podded mustard (*Hirschfeldia incana*).

Coastal Sage Scrub

The coastal sage scrub stands on site are mostly along isolated patches near the property edge. The dominant species in the sage scrub stands is California buckwheat. The understory is dominated by brome grasses.

Wildlife

Wildlife activity was moderate to high, with most of the wildlife represented by bird species and small fossorial mammals captured during the trapping effort.

Reptiles were observed mainly in the open scrub habitats and in bare areas (dirt roads, etc.) within the ruderal-annual grassland habitats.

Bird species were the most common. Mammal species observed included Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), Audubon's cottontail (*Sylvilagus aubudonii*), and coyote (*Canis latrans*).

Disturbances

Several roads crisscross the property. Other disturbed areas of the site include fencing, grading and disking.

Findings

No sign of kangaroo rats was observed on the property. The SKR is not currently present on the property or on adjacent properties. No impacts to SKR or their habitat will occur due to project implementation.

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Appendix B

PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
Amaranthaceae	<i>Salsola tragus</i> *	Russian thistle
Anacardiaceae	<i>Malosma laurina</i>	laurel sumac
Asteraceae	<i>Ambrosia psilostachya</i>	western ragweed
	<i>Artemisia californica</i>	California sage
	<i>Baccharis salicifolia</i>	mule fat
	<i>Centaurea melitensis</i> *	star thistle
	<i>Deinandra fasciculata</i>	fascicled tarplant
	<i>Encelia californica</i>	California encelia
	<i>Gazania linearis</i> *	treasure flower
	<i>Hedypnois cretica</i> *	Crete hedypnois
	<i>Helianthus annuus</i>	western sunflower
	<i>Heterotheca grandiflora</i>	telegraph weed
	<i>Isocoma menziesii</i>	goldenbush
	<i>Logfia arizonica</i>	Arizona filago
	<i>Sonchus asper</i> *	prickly sow-thistle
	<i>Sonchus oleraceus</i> *	common sow-thistle
Boraginaceae	<i>Amsinckia intermedia</i>	rancher's fiddleneck
Brassicaceae	<i>Brassica nigra</i>	black mustard
	<i>Brassica</i> sp.*	mustard
	<i>Hirschfeldia incana</i> *	perennial mustard
	<i>Lepidium lasiocarpum</i>	peppergrass
Euphorbiaceae	<i>Croton setigerus</i>	doveweed
Fabaceae	<i>Acmispon glaber</i>	deerweed
	<i>Medicago polymorpha</i> *	bur-clover
Fagaceae	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak
Geraniaceae	<i>Erodium cicutarium</i> *	red-stem filaree
	<i>Erodium moschatum</i> *	green-stem filaree
Lamiaceae	<i>Marrubium vulgare</i> *	horehound
	<i>Salvia apiana</i>	white sage
Malvaceae	<i>Malva parviflora</i> *	cheeseweed
Oxalidaceae	<i>Oxalis californica</i>	California wood-sorrel
Pinaceae	<i>Pinus</i> sp.*	ornamental pine tree
Poaceae	<i>Avena barbata</i> *	slender wild oat
	<i>Avena fatua</i> *	wild oat
	<i>Brachypodium distachyon</i> *	purple falsebrome
	<i>Bromus diandrus</i> *	common ripgut grass

FAMILY	SCIENTIFIC NAME	COMMON NAME
	<i>Bromus hordeaceus</i> *	soft chess
	<i>Hordeum murinum</i> *	barley
	<i>Bromus madritensis</i> ssp. <i>rubens</i> *	foxtail chess
	<i>Cynodon dactylon</i> *	Bermuda grass
	<i>Pennisetum setaceum</i> *	African fountain grass
Polygonaceae	<i>Eriogonum fasciculatum</i> ssp. <i>fasciculatum</i>	California buckwheat
	<i>Rumex crispus</i> *	curly dock
Primulaceae	<i>Anagallis arvensis</i> *	scarlet pimpernel
Rutaceae	<i>Citrus tangerine</i> *	tangerine
Solanaceae	<i>Nicotiana glauca</i> *	tree tobacco

*Non-native species

Appendix C
ANIMAL SPECIES OBSERVED OR DETECTED

SCIENTIFIC NAME	COMMON NAME
<u>Reptiles</u>	
Phrynosomatidae – Earless, Spiny, Tree, Side-blotched, and Horned Lizards	
<i>Sceloporus occidentalis</i>	western fence lizard
<u>Birds</u>	
Columbidae – Doves and Pigeons	
<i>Zenaida macroura</i>	mourning dove
Corvidae – Jays, Magpies, and Crows	
<i>Corvus brachyrhynchos</i>	American crow
Emberizidae – Sparrows, Longspurs, and Emberiza Buntings	
<i>Passer domesticus</i>	house sparrow
Fringillidae – Finches	
<i>Carpodacus mexicanus</i>	house finch
<u>Mammals</u>	
Geomyidae – Gophers	
<i>Thomomys bottae</i>	Botta's pocket gopher (burrows)
Leporidae – Rabbits and Hares	
<i>Sylvilagus auduboni</i>	desert cottontail (scat)
Sciuridae – Squirrels, Chipmunks, and Marmots	
<i>Spermophilus beecheyi</i>	California ground squirrel

Appendix D
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR/COMMENTS
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FT/SE CNPS List 1B.1	Very low. Occurs on cracked clay soils in sage scrub or chaparral openings, often associated with vernal pools. Appropriate habitat not present.
California adolphia (<i>Adolphia californica</i>)	--/-- CNPS List 2.1	Moderate. Occurs below 1,000 feet AMSL in elevation in sage scrub and chaparral habitats. Likely would have been observed if present.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CNPS List 1B.1	None. Occurs in sage scrub, grasslands, wetlands, disturbed habitat, sloped areas, creek beds, seasonally dry drainages, and floodplains. Suitable habitat does not occur on site.
Del Mar Manzanita (<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>)	--/-- CNPS List 1B.1	Low. Occurs within coastal sage scrub and chaparral communities.
Rainbow manzanita (<i>Arctostaphylos rainbowensis</i>)	--/-- CNPS List 1B.1	Low. Occurs within coastal sage scrub and chaparral communities.
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	--/-- CNPS List 1B.2	None. Historically associated with the isolated alkaline flats of southern California valley areas that have primarily been drained and converted to residential housing or agriculture. Appropriate habitat does not occur within the project site.
Thread leafed brodiaea (<i>Brodiaea filifolia</i>)	--/-- CNPS List 1B.1	Very low. Found in vernal moist grasslands and along vernal pool periphery. Occasionally will grow on streamside embankments in clay soils.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/-- CNPS List 1B.1	Very low. Found in vernal moist grasslands and along vernal pool periphery. Occasionally will grow on streamside embankments in clay soils.
Lewis sun cup (<i>Camissonia lewisii</i>)	--/-- CNPS List 3	None. Found in coastal bluff scrub, coastal dunes as well as areas of coastal sage scrub and valley and foothill grassland with particularly sandy soils. Suitable habitat does not occur within the project site.

Wart-stemmed ceanothus (<i>Ceanothus verrucosus</i>)	--/-- CNPS List 2.2	Low. Found in San Diego County and Baja. Occurs largely in coastal chaparral communities.
Orcutt's spineflower (<i>Chorizanthe orcuttiana</i>)	FE/SE CNPS List 1B.1	None. Found only in sandy areas on mesas in the coastal region. Generally associated with coastal sage scrub or chaparral openings. Known from only 3 occurrences in Encinitas and Point Loma. Suitable habitat does not occur within the project site.
Summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	--/-- CNPS List 1B.2	Low. Mesic north-facing slopes in southern mixed chaparral are the preferred habitat of this large, showy shrub. Rugged steep drainages seem to be a preferred location for isolated shrubs. Suitable habitat does not occur within the project site.
Western dichondra (<i>Dichondra occidentalis</i>)	--/-- CNPS List 4.2	Low. Occurs in dry, sandy banks in coastal sage scrub, chaparral, or southern oak woodland. Often proliferates on recently burned slopes.
Sticky dudleya (<i>Dudleya viscida</i>)	--/-- CNPS List 1B.2	None. An obvious species found in rock crevices and other mesic, shady areas on exposed, north facing slopes. Suitable habitat does not occur within the project site.
Palmer's goldenbush (<i>Ericameria palmeri palmeri</i>)	--/-- CNPS List 2.2	Low. Generally occurs along drainages within chaparral communities or occasionally within coastal sage scrub.
San Diego button celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/SE CNPS List 1B.1	Very low. Prefers vernal pools and marshes. Nearest reported sites are on Camp Pendleton. Suitable habitat does not occur on site.
Graceful tarplant (<i>Holocarpha virgata elongate</i>)	--/-- CNPS List 4.2	Moderate. Generally grows in grassland communities on coastal mesas and foothills.
Ramona horkelia (<i>Horkelia truncate</i>)	--/-- CNPS List 1B.3	Low. Occurs in chaparral and foothill woodland habitats.
Decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	--/-- CNPS List 1B.2	Low. Prefers clay soils and is often found in disturbed areas within coastal sage scrub. Little potential habitat within the project site.
San Diego marsh elder (<i>Iva hayesiana</i>)	--/-- CNPS List 2.2	None. Occurs in low-lying, moist, or alkaline areas. No suitable habitat occurs on site.

Robinson's peppergrass (<i>Lepidium virginicum robinsonii</i>)	--/-- CNPS List 1B.2	Low. Occurs in dry, exposed openings within coastal sage scrub and chaparral. Typically found on volcanic soils. Appropriate soils do not occur within the project site.
Felt-leaved monardella (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	--/-- CNPS List 1B.2	None. Chaparral understory, typically beneath mature stands of chamise in xeric situations. Appropriate habitat does not occur within the project site.
Spreading navarretia (<i>Navarretia fossalis</i>)	FT/-- CNPS List 1B.1	None. Occurs in vernal pools, vernal swales, or roadside depressions. Suitable habitat does not occur within the project site.
Cooper's rein orchid (<i>Piperia cooperi</i>)	--/-- CNPS List 4.2	None. Vernal moist areas, coast, and foothills. Shallow soils on small rockfalls adjacent to watercourses may be utilized. Suitable habitat does not occur within the project site.
Ahsy spike moss (<i>Selaginella cinerascens</i>)	--/-- CNPS 4.1	Moderate. Occurs in open chaparral and sage scrub. Appropriate habitat occurs within the project site.
Bottle liverwort (<i>Sphaerocarpus drewei</i>)	--/-- CNPS List 1B.1	None. Occurs in openings in chaparral and coastal sage scrub. Most rare liverwort species in North America.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	--/-- CNPS List 1B.2	Very low. Gabbro soils in low growing chamise chaparral and sage scrub. Usually, conditions are quite xeric with only limited annual growth. Appropriate soils do not occur within the project site.

*Refer to Appendix E for a listing and explanation of status and sensitivity codes

Appendix E

EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

FEDERAL AND STATE CODES

U.S. Fish and Wildlife Service (USFWS)

FE Federally listed endangered
FC Federal candidate species (discussed in more detail, below)
FT Federally listed threatened
BCC Birds of Conservation Concern (discussed in more detail, below)

California Department of Fish and Game (CDFG)

SE State listed endangered
ST State listed threatened
SSC State species of special concern
Fully Protected Fully Protected species refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFG.

OTHER CODES AND ABBREVIATIONS

USFWS Federal Candidate (FC) Species

Federal candidate species are those for which the USFWS has on file “sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher-priority listing actions. [The USFWS] maintain[s] this list for a variety of reasons: to notify the public that these species are facing threats to their survival; to provide advance knowledge of potential listings that could affect decisions of environmental planners and developers; to provide information that may stimulate conservation efforts that will remove or reduce threats to these species; to solicit input from interested parties to help us identify those candidate species that may not require protection under the [Endangered Species Act] or additional species that may require the Act’s protections; and to solicit necessary information for setting priorities for preparing listing proposals” (Federal Register 70:90 [May 11, 2005]).

USFWS Birds of Conservation Concern (BCC)

This report from 2002 aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities and draw attention to species in need of conservation action.

Appendix E (cont.)
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

California Native Plant Society (CNPS) Codes

Lists

1A = Presumed extinct.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.

4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

.1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2 = Fairly endangered in California (20 to 80 percent occurrences threatened)

.3 = Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A CA Endemic entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no threat code extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

APPENDIX F

SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR/COMMENTS
INVERTEBRATES		
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE/--	None. Occurs within ephemeral water holding basins. No suitable habitat occurs on site.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/--	None. Populations are known to exist only as several (probably isolated) colonies in southwestern Riverside and southern San Diego counties as well as northern Baja. The principal larval host plant of this species in San Diego is dwarf plantain.
Harbison's dun skipper (<i>Euphyes vestris harbisoni</i>)	--/--	None. Typically not found within 10 miles of the coast. Restricted to chaparral and oak riparian areas with narrow drainages, particularly where the larval host plant (San Diego sedge [<i>Carex spissa</i>]) occurs. No suitable habitat on site.
Hermes copper butterfly (<i>Lycaena hermes</i>)	--/--	None. Species' host plant spiny redberry (<i>Rhamnus crocea</i>) was not observed within the project site.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE/--	None. Occurs within ephemeral water holding basins. No suitable habitat occurs on site.
VERTEBRATES		
Fish		
Arroyo chub (<i>Gila orcutti</i>)	--/SSC	None. Suitable habitat not present.
Tidewater goby (<i>Eucyclogobius newberryi</i>)	FE/SSC	None. Suitable habitat not present.
Amphibians		
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC	None. Found on stream banks under open-canopy riparian forest characterized by willows, cottonwoods, or sycamores. Breeds in areas with shallow, slow moving streams, but burrows in adjacent uplands during dry months.

California red-legged frog (<i>Rana aurora draytoni</i>)	FT/SSC	None. Appropriate habitat is characterized by dense, shrubby riparian vegetation with deep, slow moving water. Believed extirpated from San Diego County.
Western spadefoot (<i>Spea hammondi</i>)	--/SSC	None. Prefers floodplains, washes, and low hills. Southern California habitats include coastal sage scrub, chaparral, and grassland. Important habitat components include temporary pools (which form during winter and spring rains) for breeding and friable soils for burrowing. No suitable habitat on site.
Reptiles		
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)	--/SSC	Low. Occurs in areas with loose soil, particularly sand dunes or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub. Species is reclusive and rarely observed without night surveys or pitfall trapping.
Rosy boa (<i>Charina trivirgata</i>)	--/--	Low. Mostly nocturnal, occurring among rocky outcrops in coastal sage scrub, chaparral, and desert scrub. Little suitable habitat occurs within the project site.
Southwestern pond turtle (<i>Clemmys marmorata pallida</i>)	--/SSC	None. Open water aquatic species. Suitable habitat not present.
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	--/SSC	Moderate. Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Suitable habitat occurs within the project site.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	--/--	Moderate. Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Suitable habitat occurs within the project site.
San Diego banded gecko (<i>Coleonyx variegatus abbotti</i>)	--/--	Low. Chaparral and coastal sage scrub in areas with rock outcrops. Very little suitable habitat occurs within the project site.

Northern red-diamond rattlesnake (<i>Crotalus ruber ruber</i>)	--/SSC	Moderate. Found in chaparral, coastal sage scrub, along creek banks, and in rock outcrops or piles of debris with a supply of burrowing rodents for prey. Some suitable habitat occurs within the project site.
Coronado skink (<i>Eumeces skiltonianus interparietalis</i>)	--/SSC	Moderate. Occurs in grasslands, coastal sage scrub, open chaparral, oak woodland, and coniferous forests, usually under rocks, leaf litter, logs, debris, or in the shallow burrows it digs. Some suitable habitat occurs within the project site.
San Diego horned lizard (<i>Phrynosoma coronatum blainvillii</i>)	--/SSC	Moderate. Coastal sage scrub and open areas in chaparral, oak woodlands, and coniferous forests with sufficient basking sites, adequate scrub cover, and areas of loose soil; require native ants, especially harvester ants (<i>Pogonomyrmex</i> sp.), and are generally excluded from areas invaded by Argentine ants (<i>Linepithema humile</i>). Some suitable habitat occurs within the project site.
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SSC	Low. Found in coastal sage scrub, chaparral, riparian, grasslands, and agricultural fields (Zeiner et al. 1988). Prefers open habitats with friable or sandy soils, burrowing rodents for food, and enough cover to escape being preyed upon. Some suitable habitat occurs within the project site.
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/SSC	Low. Occurs along permanent and intermittent streams bordered by dense riparian vegetation, but occasionally associated with vernal pools or stock ponds. No suitable habitat occurs on site.
South coast gartersnake (<i>Thamnophis sirtalis</i> ssp. <i>novum</i>)	--/--	Low. Occurs in aquatic habitats, preferably rocky streams with protected pools, cattle ponds, marshes, vernal pools, and other shallow bodies of water lacking large, aquatic predators. No suitable habitat occurs on site.

Birds		
Sharp-shinned hawk (<i>Accipiter striatus</i>)	--/WL	Low. Usually observed in areas with tall trees or other vegetative cover; species can be observed in a variety of habitats. Widespread distribution in San Diego County, but occurs in small numbers and only in the winter.
Tricolored blackbird (<i>Agelaius tricolor</i>)	BCC/SSC	Low. Forages in pastures, croplands, lakeshores, and irrigated grassy areas. Breeds in freshwater marsh and emergent wetlands.
Southern California rufouscrowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/WL	Moderate. Occurs in coastal sage scrub and open chaparral as well as shrubby grasslands.
Grasshopper sparrow (<i>Ammodramus savannarum</i>)	--/SSC	Low. Inhabits prairie grasslands and pastures.
Bell's sage sparrow (<i>Amphispiza belli belli</i>)	BCC/WL	Low. Occurs in sunny, dry stands of coastal sage scrub and chaparral.
Golden eagle (<i>Aquila chrysaetos</i>)	BCC/WL	Low. Forages in grassy and open, shrubby habitats. Nests most often on cliffs, less often in trees. Tends to require solitude and is usually found at a distance from human habitation. Project site is likely too developed for this species.
Great blue heron (<i>Ardea herodias</i>)	--/--	Low. Occurs throughout San Diego County in wetland habitats, but may be observed foraging away from water. No wetland habitat occurs on site.
Long-eared owl (<i>Asio otus</i>)	--/SSC	None. In San Diego County, species is a rare resident of oak woodlands and riparian forests. Ideal habitats possess closed canopies and are in proximity to open foraging habitat. No suitable habitat occurs on site.
Burrowing owl (<i>Athene cunicularia</i>)	BCC/SSC	None. Restricted to essentially flat, open country with suitable burrow sites. Some suitable habitat occurs within the project site. No burrows or signs of burrowing owls observed on site.
Green heron (<i>Butorides striatus</i>)	--/--	None. Occurs throughout San Diego County in wetland habitats. No suitable habitat occurs on site.

Coastal cactus wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	BCC/SSC	None. Observed in coastal lowlands in cactus thickets. No suitable habitat occurs within the project site.
Northern harrier (<i>Circus cyaneus</i>)	--/SSC	Low. In San Diego County, distribution primarily scattered throughout lowlands but can also be observed in foothills, mountains, and desert. Would have been observed if present.
Yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FC, BCC/SE	Low. Considered extirpated from San Diego County. Found in open woodlands with dense understories, riparian woodlands, dense thickets, and occasionally parks. Rare in the western U.S.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/SE	None. Occurs in San Diego County during the breeding season within riparian/wetland habitats. No suitable habitat occurs on site.
California horned lark (<i>Eremophila alpestris actia</i>)	--/WL	Moderate. Species prefers sandy beaches, agricultural fields, grasslands, and open areas. Some suitable habitat occurs within the project site
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT/--	Low. Species occurs in Diegan coastal sage scrub habitat. The habitat on site is sparse, fragmented, and surrounded by developed and agricultural land. Given the small amount of habitat on site and the lack of adjacent suitable habitat this species is not anticipated to occur on site.
Merlin (<i>Falco columbarius</i>)	--/WL	Low. In San Diego County, the species is rare and can only be found in the winter. It is usually observed in grasslands, but can occur in any habitat except dense woodlands. Suitable habitat occurs within the project site.

Loggerhead shrike (<i>Lanius ludovicianus</i>)	BCC/SSC	Moderate. Habitat includes a combination of open areas with adequate perching locations. Suitable habitat occurs within the project site. Species would have likely been detected if present.
Summer tanager (<i>Piranga rubra</i>)	--/SSC	None. Common in mature riparian forest, especially areas with cottonwood trees. No suitable habitat occurs on site.
Light-footed clapper rail (<i>Rallus longirostris levipes</i>)	FE/SE	None. Coastal salt marshes, especially those dominated by cordgrass (<i>Spartina</i> sp.), but has been known to use brackish and freshwater sites. Suitable habitat is not present.
Barn owl (<i>Tyto alba</i>)	--/--	Low. Occurs in woodland habitats and open areas with trees or other structures that can offer shelter. Some suitable habitat occurs adjacent the project site.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE	None. Prefers riparian woodland and is frequent in areas that combine an understory of willows (<i>Salix</i> spp.) and mule fat. No suitable habitat occurs on site.
Mammals		
Pallid bat (<i>Antrozous pallidus</i>)	--/SSC	None. Found in deserts and canyons. Daytime roosts in buildings, crevices; less often in caves, mines, hollow trees, and other shelters. Project site outside species range.
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	--/--	Very low. Found in chaparral understory, typically beneath mature stands of chamise in xeric situations. Appropriate habitat does not occur within the project site.
Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	--/SSC	Very low. Prefers arid scrub, mixed forest, and canyons in mountain ranges rising from the desert of extreme southern California. Roosts in caves, mines, and sometimes in buildings near the entrance. Project site outside species range.

Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FE/ST	None. Found in sparsely vegetated habitats of sagebrush or annual forbs and grasses. Focused habitat assessment determined habitat to be non-suitable.
Western mastiff bat (<i>Eumops perotis</i>)	--/SSC	None. Permanent resident in southern California in chaparral and where coast live oaks are found. Also occurs in arid, rocky areas, cliffs, and canyons. No suitable habitat occurs on site.
Western red bat (<i>Lasiurus blossevillii</i>)	--/SSC	None. Found in streamside habitats dominated by cottonwoods, oaks, sycamores, and walnuts, and rarely in desert habitats. No suitable habitat occurs on site.
Black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/SSC	Moderate. Occurs primarily in open habitats including open coastal sage scrub, chaparral, grasslands, croplands, and disturbed areas (if at least some shrub cover present).
California leaf-nosed bat (<i>Macrotus californicus</i>)	--/SSC	None. Found in desert scrub, often in abandoned mine tunnels. No suitable habitat occurs on site.
Yuma myotis (<i>Myotis yumanensis</i>)	--/--	None. Occurs near ponds, streams, or lakes. Found by day under sidings or shingles, caves, mines, buildings, or under bridges. No suitable habitat occurs on site.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	--/SSC	Low. Found in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC	None. Found in the desert regions of southern California, Prefers to roost in rock outcrops. Project site outside species range.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC	Low. Locally abundant in parts of southern California, Prefers rocky areas and roosts in rocky cliffs, caves, buildings, or tree holes.
American badger (<i>Taxidea taxus</i>)	--/SSC	Low. Occurs in level, open areas in grasslands, agricultural fields, and open shrub habitats. This species digs large burrows in dry, friable soils, which are easily observed if present.

*Refer to Appendix E for a listing and explanation of status and sensitivity codes

