

Torrey Meadows Drive Overcrossing at State Route 56

Natural Environment Study

(Minimal Impacts)

City of San Diego, San Diego County, California
Section 14 of Township 14 South, Range 3 West
Del Mar, California, USGS 7.5-minute topographic map

August 2015

STATE OF CALIFORNIA
Department of Transportation
City of San Diego

Prepared By: Karl Osmundson, Biology Group Manager/Principal Biologist
(619) 462-1515
HELIX Environmental Planning, Inc.

Recommended
for Approval By: _____ Date: _____
Sue Scatolini, Biologist
(858) 616-6640
Caltrans District 11

Approved By: _____ Date: _____
Shay Lynn M. Harrison, Environmental Analysis Branch Chief
(619) 688-0190
Caltrans District 11



1. Summary

This Natural Environmental Study (Minimal Impacts) [NESMI] report presents the results of a biological resources study performed by HELIX Environmental Planning, Inc. (HELIX) for the proposed Torrey Meadows Drive Overcrossing at State Route 56 (SR-56) (project) located in the City of San Diego, San Diego County, California. The proposed project generally includes construction of a new bridge that will span SR-56 to connect two existing termini of Torrey Meadows Drive. The biological resources study was conducted to document existing conditions and determine the potential for sensitive biological resources to occur within an approximately 57.2-acre Biological Study Area (BSA). The proposed project has been specifically designed to be entirely contained within existing disturbed and developed land, most of which occurs within existing California Department of Transportation (Caltrans) right-of-way (ROW) for SR-56.

No direct impacts are expected to occur to sensitive biological resources. The project will be constructed adjacent to off-site sensitive Diegan coastal sage scrub (DCSS) habitat associated with open space within McGonigle Canyon, and located within the Multi-Habitat Planning Area (MHPA) for the adopted City of San Diego (City) Multiple Species Conservation Program (MSCP) Subarea Plan. Protocol-level surveys conducted in 2014 confirmed the presence of federally threatened coastal California gnatcatcher (*Polioptila californica californica*; CAGN) within the off-site DCSS, including a single breeding pair located within 500 feet of the project site. Although no direct impacts to DCSS or CAGN individuals are expected, project construction could result in temporary indirect noise-related impacts if CAGN are nesting within 500 feet of construction areas. Avoidance measures are proposed herein to ensure potential impacts to CAGN are avoided. With the implementation of these measures, the project would have no effect on CAGN or its habitat.

In addition, some of the trees and shrubs on and within 500 feet of the project site provide potential nesting habitat for common (non-sensitive) bird species, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG Code). Avoidance measures are proposed herein to ensure potential impacts to nesting birds and raptors. Last, the project will be required to comply with the MSCP/MHPA Land Use Adjacency Guidelines due adjacency with the MHPA. With the implementation of the proposed measures and adherence to the MSCP/MHPA Land Use Adjacency Guidelines, the project would be consistent with the City's MSCP Subarea Plan, and would be in compliance with all relevant federal, State, and local regulations pertaining to biological resources.

2. Introduction

The project site is generally located along the SR-56 corridor, west of Interstate 15 (I-15) and east of Interstate 5 (I-5), in the western portion of San Diego County, California (see Figure 1 of Appendix C). Specifically, the site spans the SR-56 corridor and associated Caltrans ROW at Post Mile 5.6, which is located west of the existing Carmel Mountain Road bridge over SR-56, and east of the existing Rancho Santa Fe Farms Road bridge over SR-56, in the City of San Diego (Figure 2). The site is depicted within Section 14 of Township 14 South, Range 3 West on the Del Mar, California, U.S. Geological Survey (USGS) 7.5-minute topographic map (Figure 3). The BSA defined for this NESMI is 57.2 acres in size, and encompasses all potential direct and indirect impact areas (Figure 4). A distance buffer of 500 feet from the project site is used to encompass the potential direct and indirect impact areas for the BSA. Figure 5 illustrates the MSCP designations, and where the MHPA lies in relation to the project site and BSA.

As depicted on Figures 6a and 6b, the new bridge over SR-56 will include a cast-in-place structure conforming to Caltrans bridge design standards. The proposed bridge would tie into existing roads on both sides of the freeway, including Torrey Meadows Drive to the north and south. The proposed project also includes various infrastructure improvements that generally include: (1) a 16-inch water main that would connect two existing 16-inch water mains in Torrey Meadows Drive on the north side of the bridge and the existing 8-inch water main on the south side of the bridge at the intersection of Torrey Meadows Drive and Primrose Lane and; (2) the potential replacement and/or removal of one or more of the existing utility facilities (sewer, water, and storm drain). The entirety of the project would be constructed within existing disturbed and developed land.

3. Study Methods

Prior to conducting the survey, a thorough review of recent aerial imagery (Google 2014), topographic maps (USGS 1994), U.S. Department of Agriculture (USDA) soils maps (USDA 2014), and other maps of the BSA were reviewed. Database applications reviewed included California Natural Diversity Database (CNDDDB) (California Department of Fish and Wildlife [CDFW] 2014), California Native Plant Society (CNPS) Electronic Inventory (CNPS 2014), U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2014), and CDFW species lists (CDFW 2014a, 2014b, and 2011) for areas within approximately five miles of the BSA, including selected results from the Del Mar and La Jolla, California USGS 7.5 minute quadrangles. The Preliminary Environmental Analysis Report (PEAR; HELIX 2014a) and project plans (T.Y. Lin International 2013) were also reviewed.

HELIX Biologist, Karl Osmundson, Caltrans Associate Biologist, Mike Galloway, and Caltrans Environmental Generalist, Gretchen Eichar corresponded over phone on April 2, 2014 to discuss the project and biological resources issues, including acceptance of the BSA and NESMI format, the need to perform 2014 CAGN surveys, and applicability of the MSCP. The meeting was followed by email correspondence on April 3, 2014 between Karl Osmundson and Caltrans Environmental Planner, Olga Estrada to confirm the items discussed during the phone correspondence. The City was also contacted to discuss the project. No other agencies or professionals were contacted or consulted for the preparation of the NESMI.

The 57.2-acre BSA was surveyed by HELIX on November 4, 2013 in order to map vegetation communities; assess the presence of suitable habitat for sensitive plant and animal species; and, determine the presence of other sensitive biological resources, such as waterways and wetlands. Vegetation communities were generally classified according to Oberbauer et al. (2008) and CDFW's List of Terrestrial Natural Communities (2010). Plant species names follow Baldwin et al. (2012). Animal species names follow CDFW (2008, 2011). There were no known limitations affecting the results of the surveys.

4. Environmental Setting

4.1 Description of the Existing Biological and Physical Conditions

General land use within the BSA includes: existing transportation developments and Caltrans ROW associated with SR-56, Torrey Meadows Drive, Via Ambrosia, Copperwind Lane, and Via Carrillo; residential developments; and, open space associated with McGonigle Canyon. The BSA is highly disturbed, and subject to a high pedestrian and vehicle traffic; noise and nighttime lighting from vehicles, streets, and existing buildings; trash and debris; and, non-native ornamental landscaping. The BSA is relatively flat with elevations from approximately 250 feet above mean sea level (amsl) to approximately 375 feet amsl. No natural drainage features or wetlands occur. No vernal pools or ephemeral basins occur. As depicted on Figure 7, two soil mapping units occur within the BSA: Diablo clay, 2 to 9 percent slopes; and Olivenhain cobbly loam, 9 to 30 percent slopes. The project site itself is contained entirely within disturbed habitat (DH) and developed land (DEV). Additional habitat types mapped within the BSA include non-native grassland (NNG), DCSS, and southern mixed chaparral (SMC), all of which occur off site in association with McGonigle Canyon. Overall, the existing biological and physical conditions within the project site itself are not suitable for any sensitive biological resources.

4.2 Regional Species and Habitats of Concern

Sensitive Habitats or Natural Communities of Concern

Based on a list compiled through the CNDDDB (CDFW 2012a), seven sensitive natural communities are known to occur within approximately five miles of the BSA (see Table A-2 in Appendix A). Three sensitive communities occur off site in the northern and northwestern portions of the BSA: DCSS, SMC, and NNG.

Plant Species of Concern

Based on a list compiled through the CNDDDB (CDFW 2014) and other sources (CNPS 2014), 43 special-status plant species have been reported within approximately five miles of the BSA (see Table A-1 in Appendix A). None of the 43 special-status plant species have been reported as occurring within the project site itself. None of the 43 species were observed or have a high potential to occur within the project site due to existing developed areas; absence of suitable soils, hydrology, and vegetation associations; and, high levels of disturbance.

Animal Species of Concern

Based on a list compiled through the CNDDDB (CDFW 2014) and other sources (CDFW 2008, 2011), 25 special-status animal species have been reported within approximately five miles of the BSA (see Table A-1 in Appendix A). None of the 25 special-status animal species have been reported as occurring within the project site itself. None of the 25 species were observed or have a high potential to occur within the project site itself due to the lack of suitable habitat and high levels of disturbance. Protocol-level surveys for CAGN were performed in the summer of 2014 within the DCSS that occurs within the BSA. A single off-site CAGN pair was observed north of SR-56 within 500 feet of the site. In addition, a single Cooper's hawk (*Accipiter cooperii*) was observed temporarily foraging over the northwestern BSA.

Wildlife Corridors and Linkages

The project site is comprised primarily of disturbed and developed land. McGonigle Canyon is located off site in the northern portions of the BSA. McGonigle Canyon functions as a regional wildlife corridor connecting large habitat blocks located to the northeast of the BSA, near Santaluz, with those located to the south near Arroyo and Cielo Del Mar. The corridor passes underneath SR-56 in the northwest portion of the BSA.

Waterways and Wetlands

No natural waterways or wetlands occur within the BSA, including any resources subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB), pursuant to Section 401 of the CWA or State Porter-Cologne Water Quality Control Act, or the CDFW,

pursuant to Sections 1600 *et seq.* of the CFG Code. Several concrete brow ditches and roadside ditches occur within the Caltrans ROW for SR-56. These man-made features were constructed by Caltrans for the purposes of collecting and diverting storm water runoff from SR-56 and ROW areas. The man-made features do not support regional species or habitat of concern, and would not fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW.

4.3 Vegetation

As depicted on Figure 8, five vegetation communities or land use types occur within the BSA: DEV, DH, NNG, DCSS, and SMC. DEV is the predominant community type within the BSA, covering approximately 47.3 acres of transportation and residential developments and associated ornamental landscaping. Approximately 0.7 acre of DH occurs within the BSA, mostly within the project site itself, including areas characterized by bare earth and non-native plant species such as Russian thistle (*Salsola tragus*). Approximately 0.9 acre of NNG comprised primarily of non-native grasses (*Avena* spp., *Bromus* spp.) occurs off site in the northern portion of the BSA. In addition, approximately 7.4 acres of DCSS occurs off site in the western portion of the BSA and is comprised primarily of goldenbush (*Isocoma menziesii*), coyote brush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), and California buckwheat (*Eriogonum fasciculatum*). Last, an approximately 1.1-acre stand of SMC occurs off site in the northern portion of the BSA dominated by lemonade berry (*Rhus integrifolia*), laural sumac (*Malosma laurina*), and scrub oak (*Quercus berberidifolia*).

4.4 Animals

The BSA is largely developed, but does provide some habitat for wildlife species. Common species observed or otherwise detected during the survey included birds such as American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*); and, mammals such as desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and dog (*Canis familiaris*). In addition, the federally listed CAGN was observed off site within the DCSS located in the northern and northwestern portions of the BSA.

5. Project Impacts

The project would result in a permanent transportation structure, and temporary construction activities within a maximum disturbance footprint of approximately 5.4 acres. The project has been specifically sited and designed within disturbed and developed areas that lack sensitive biological resources. As depicted within Figure 8, impacts would occur to approximately 4.9 acres of DEV and 0.5 acre of DH. DEV and DH are not sensitive natural communities or regional habitats of concern. All portions of the BSA that fall outside of the project site footprint

would be avoided, and no direct impacts would occur. Therefore, no impacts would occur to sensitive natural communities and no mitigation is proposed.

None of the regional plant species of concern have a high potential to occur within the project site; therefore, none are likely to be impacted. None of the regional animal species of concern have a high potential to occur within the project site itself; therefore, none are likely to be directly impacted. A single off-site CAGN pair was observed, north of SR-56, within 500 feet of the project site. While no direct impacts are expected to occur, measures are proposed herein to avoid potential indirect noise-related impacts to CAGN during project construction. In addition, a single Cooper's hawk was observed foraging off site over the northwestern portion of the BSA during the 2014 survey. No impacts would occur to suitable foraging habitat for raptors, including Cooper's hawk. Measures are proposed herein to avoid impacts to nesting birds, including raptors, in order to comply with the MBTA and CFG Code.

The project is setback from the existing McGonigle Canyon corridor. The project would not introduce new impediments and/or incompatible uses to the area. Wildlife would continue to have unobstructed use of the corridor during project construction and operation. Impacts would be less than significant. No impacts would occur to jurisdictional waterways or wetlands.

With the implementation of avoidance measures for CAGN, the project would be consistent with the MSCP. The project is restricted entirely to DEV and DH, which are common Tier IV uplands. No direct impacts would occur to covered species, non-covered species, narrow endemic species, sensitive uplands, wetlands, or other resources subject to the Environmentally Sensitive Lands (ESL) regulations or addressed in the City's MSCP Subarea Plan. Potential indirect impacts to CAGN would be minimized through restrictions on construction during the breeding season, as discussed below. In addition, the project will be required to comply with the MSCP/MHPA Land Use Adjacency Guidelines due adjacency with the MHPA.

6. Mitigation Measures

Mitigation measures are proposed below to ensure no impacts to CAGN and other nesting birds, including raptors, occur during project construction. The measures will be integrated into an Environmental Commitments Record (ECR) for the project.

Habitat occupied by CAGN occurs within 500 feet of the project site, including habitat located within MHPA for the City's MSCP Subarea Plan. If construction must take place during the CAGN breeding season (March 1 to August 15), then the City will implement CAGN avoidance and noise mitigation in accordance with BIO-1 below to ensure that no impacts occur to CAGN during project construction.

BIO-1 Gnatcatcher Avoidance: Prior to the first pre-construction meeting for a grading permit that involves direct or indirect disturbance of native habitat, the City shall verify that the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur within 500 feet of the off-site coastal sage scrub habitat between the breeding season of the coastal California gnatcatcher (March 1 and August 15), until the following requirements have been met to the satisfaction of the City:

- A. A qualified biologist (possessing a valid ESA Section 10(a)(1)(A) Recovery Permit) shall survey appropriate habitat (coastal sage scrub) areas within the off-site lands that lie 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 coastal California gnatcatcher. If no appropriate habitat is present then the surveys will not be required. If appropriate habitat is present, surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If gnatcatchers are present within the off-site lands, then the following conditions must be met:
 - I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted within the off-site lands. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and
 - II. 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 within the off-site lands. 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 City Manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from

such activities shall be staked or fenced under the supervision of a qualified biologist; or

- III. At least two weeks prior to the commencement of construction activities during the designated breeding season, under the 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 (within the off-site lands) occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area within the off-site lands 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 within the off-site lands 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 and the City Manager, as necessary, to reduce noise levels within occupied off-site 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 coastal California gnatcatchers are not detected within the off-site lands during the protocol survey, the qualified biologist shall submit substantial evidence to the City Manager and applicable wildlife agencies which demonstrates whether or not mitigation measures are necessary between March 1 and August 15 as follows:

- I. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then Condition A.III shall be adhered to as specified above.
- II. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

7. Permits Required

No permits pertaining to biological resources are expected to be required. Potential impacts to CAGN would be covered under the City's MSCP Subarea Plan and mitigated to less than significant levels in accordance with the CAGN avoidance and noise mitigation in BIO-1. Impacts to CAGN would not require separate Endangered Species Act (ESA) Section 7 consultation or Section 10(a) permitting with the USFWS due the applicability of the City's adopted MSCP Subarea Plan. The MSCP is a comprehensive, long-term habitat conservation planning program developed pursuant to ESA, California Endangered Species Act (CESA), and the California Natural Community Conservation Planning Act. The City's MSCP Subarea Plan and Implementing Agreement were adopted by City Council and approved in 1997. Under the City's MSCP Subarea Plan, the City has "take" authority for 85 covered species, which include CAGN.

The project would comply with the requirements of the RWQCB. Caltrans operates under its own NPDES permit, which covers operations and requires compliance with the statewide Construction General Permit. A Caltrans-approved Storm Water Pollution Prevention Plan (SWPPP) would be implemented during construction to comply with the Construction General Permit. The City operates under the Municipal NPDES permit for long-term requirements, as well as the provisions of the NPDES Construction General Permit for construction projects. The project would include conformance measures appropriate in either case.

8. References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. *The Jepson Manual: Vascular Plants of California*, second edition. University of California Press, Berkeley.
- California Department of Fish and Wildlife (CDFW). 2014a. *State and Federally Listed Plants of California*. CDFW, Natural Diversity Data Base. Sacramento, CA. July.

- California Department of Fish and Wildlife (CDFW). 2014b. Special Vascular Plants, Bryophytes, and Lichens List. CDFW, Natural Diversity Data Base. Sacramento, CA. July.
- California Department of Fish and Wildlife (CDFW). 2014. Biogeographic Data Branch, California Natural Diversity Database (CNDDDB), RareFind Version 3.1.0. January 2014.
- California Department of Fish and Wildlife (CDFW). 2011. Special Animals. CDFW, Natural Diversity Database. Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 2008. Complete List of Amphibian, Reptile, Bird and Mammal Species in CA. September.
- California Native Plant Society (CNPS). 2014. Inventory of Rare and Endangered Plants (v7-13feb 2-07-13). Data provided by the participants of CNPS. Accessed on July 16, 2014. Available at: <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>
- HELIX Environmental Planning, Inc. (HELIX) 2014a. Preliminary Environmental Analysis Report (PEAR) for Torrey Meadows Drive Overcrossing at State Route 56. February 12.
- Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," Robert F. Holland, Ph.D., October 1986. March 2008. Available at: http://www.sdcaanyonlands.org/images/pdfs/CEP/CEPGuideMaterials/veg_comm_sdcounty_2008_doc.pdf.
- T.Y. Lin International. 2013. Torrey Meadows Drive Project Plans. January 23.
- U.S. Department of Agriculture (USDA) Soil Survey Staff, Natural Resources Conservation Service. 2014. Web Soil Survey. Accessed July 16, 2014. Available at: <http://websoilsurvey.nrcs.usda.gov>.
- U.S. Fish and Wildlife Service (USFWS). 2014. Critical Habitat Portal. Accessed on July 17, 2014. Available at: <http://criticalhabitat.fws.gov>.
- U.S. Geological Survey (USGS). 1994. Del Mar, CA 7.5 Minute Series (Topographic) Map.

9. Appendix

A list of regional habitats and species reported to the CNDDDB at locations within approximately five miles of the BSA is included as Appendix A. Representative photographs are included as Appendix B. Figures 1 through 8 are provided in Appendix C.



Appendix A

REGIONAL SPECIES AND HABITATS
OF CONCERN



Appendix A
Table A-1 Regional Species of Concern

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS					
<i>Aphanisma blitoides</i>	Aphanisma	--/-- CNPS List 1B.2 MSCP NE MSCP Covered	Distribution: Coastal San Diego County Habitat: Coastal bluffs near the ocean and beach dunes	A	No suitable habitat occurs within the BSA.
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita	FE/-- CNPS List 1B.1 MSCP Covered	Distribution: Coastal San Diego County and Baja Habitat: Relatively open coastal chaparral. At occasional inland sites, occurs in denser mixed chaparral vegetation.	HP	Suitable habitat occurs within the BSA.
<i>Artemisia palmeri</i>	San Diego sagewort	--/-- CNPS List 4.2	Distribution: Coastal San Diego County and Baja Habitat: Stream courses, often within coastal sage scrub and southern mixed chaparral	A	No suitable habitat occurs within the BSA.
<i>Astragalus tener</i> var. <i>titi</i>	Coastal dunes milk-vetch	FE/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: San Diego, Los Angeles, and Monterey counties Habitat: Coastal dunes and sandy places along the coast	A	No suitable habitat occurs within the BSA.
<i>Atriplex pacifica</i>	South coast saltscale	--/-- CNPS List 1B.2	Distribution: Coastal areas of central and southern California and islands off the southern coast Habitat: Xeric, often mildly disturbed locales of coastal bluff scrub. Surrounding habitat is usually open Diegan coastal sage scrub, although it is found on alkaline flats in areas devoid of taller shrubs.	A	No suitable habitat occurs within the BSA.
<i>Baccharis vanessae</i>	Encinitas baccharis	FT/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: San Diego County endemic; also found in Riverside County Habitat: Occurs in mature but relatively low-growing chaparral; also found in southern maritime and southern mixed chaparrals	A	No suitable habitat occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Bergerocactus emoryi</i>	Golden-spined cereus	--/-- CNPS List 2.2	Distribution: Coastal San Diego County, Baja, and San Clemente and Santa Catalina islands Habitat: Sandy soils and dry bluffs along the coast associated with maritime succulent scrub	A	No suitable habitat occurs within the BSA.
<i>Bloomeria (Muilla) clevelandii</i>	San Diego goldenstar	--/-- CNPS List 1B.1 MSCP Covered	Distribution: Only in San Diego County and Baja Habitat: Valley grasslands, mima mounds, generally among vernal pools	HP	No vernal pools or mima mounds occur within the BSA, though grasslands are present.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/SE CNPS List 1B.1 MSCP Covered	Distribution: Interior valley regions of Riverside and San Diego counties Habitat: Clay lens soils in annual grasslands and vernal pools	HP	Annual grasslands occur within the BSA.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	--/-- CNPS List 1B.1 MSCP Covered	Distribution: Riverside and San Diego counties and Baja Habitat: Occurs in vernal pool communities and in vernal moist grasslands	A	No suitable habitat occurs within the BSA.
<i>Ceanothus verrucosus</i>	Wart-stemmed ceanothus	--/-- CNPS List 2.2 MSCP Covered	Distribution: Limited to San Diego County Habitat: Occurs among mesic coastal chaparral vegetation	A	No suitable habitat occurs within the BSA.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	--/-- CNPS List 1B.1	Distribution: Ventura, Los Angeles, Orange, and San Diego counties and Baja Habitat: Found in coastal bluff scrub, coastal dune areas	A	No suitable habitat occurs within the BSA.
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	FE/SE CNPS List 1B.1	Distribution: San Diego County Habitat: Maritime chaparral, closed-cone coniferous forest and coastal scrub/sandy openings between 10 to 410 ft	A	No suitable habitat occurs within the BSA.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long-spined spineflower	--/-- CNPS List 1B.2	Distribution: Riverside and San Diego counties and Baja Habitat: On clay lenses in coastal sage scrub or chaparral areas with little or no shrub cover	HP	Diegan coastal sage scrub and appropriate soils occur within the BSA. Species not observed during surveys.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer holly	--/-- CNPS List 1B.2	Distribution: Orange, Riverside, and San Diego counties and Baja Habitat: Mesic north-facing slopes in southern mixed chaparral or southern maritime chaparral.	A	No suitable habitat occurs within the BSA.
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand aster	--/-- CNPS List 1B.1	Distribution: Southwestern San Diego County and possibly Baja Habitat: Coastal chaparral primarily in sandy openings between chamise is typical microhabitat	A	No suitable habitat occurs within the BSA.
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	Del Mar Mesa sand aster	--/-- CNPS List 1B.1 MSCP Covered	Distribution: San Diego County from Carlsbad to Fort Rosecrans Habitat: Sandy and disturbed areas within southern maritime chaparral	A	No suitable habitat occurs within the BSA.
<i>Cylindropuntia californica</i> var. <i>californica</i>	Snake cholla	--/-- CNPS List 1B.1 MSCP NE	Distribution: Point Loma south to Chula Vista and into northern Baja Habitat: Diegan coastal sage scrub and maritime succulent scrub on xeric hillsides	A	Diegan coastal sage scrub occurs within the BSA, however, species' range is south of the BSA. Would have been observed during surveys if present.
<i>Deinandra conjugens</i>	Otay tarplant	FT/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Southern San Diego County and northwestern Baja Habitat: Fractured clay soils in grasslands or lightly vegetated coastal sage scrub	A	Diegan coastal sage scrub and grasslands occur within the BSA. However, BSA is outside of species' range.
<i>Dudleya brevifolia</i>	Short-leaved dudleya	--/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Range approximately 2.5 mi wide by 7.0 mi long between La Jolla and Del Mar Habitat: Open areas and sandstone bluffs of chamise chaparral or Torrey pine forest	A	No suitable habitat occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Dudleya variegata</i>	Variegated dudleya	--/-- CNPS List 1B.2 MSCP NE MSCP Covered	Distribution: San Diego County and Baja Habitat: Openings in sage scrub and chaparral, isolated rocky substrates in open grasslands, and a proximity to vernal pools and mima mounds	HP	Diegan coastal sage scrub and grasslands occur within the BSA. Would likely have been observed during surveys if present.
<i>Dudleya viscida</i>	Sticky dudleya	--/-- CNPS List 1B.2 MSCP Covered	Distribution: Coastal northern San Diego County; below 1,200 ft in Orange and Riverside counties Habitat: Conspicuous perennial succulent that grows primarily on very steep north-facing slopes within coastal bluff scrub, chaparral, and rocky coastal scrub	A	No suitable habitat occurs within the BSA.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Riverside and San Diego counties and Baja Habitat: Coastal scrub, grasslands and vernal pools/mesic areas between 66 and 2,034 ft	A	No suitable habitat occurs within the BSA.
<i>Euphorbia misera</i>	Cliff spurge	--/-- CNPS List 2.2	Distribution: Corona Del Mar to Baja Habitat: Rocky areas of coastal bluff scrub, coastal scrub, and Mojavean desert scrub	A	No suitable habitat occurs within the BSA.
<i>Ferocactus viridescens</i>	San Diego barrel cactus	--/-- CNPS List 2.1 MSCP Covered	Distribution: Below 660 ft in sandy or disturbed areas along coastal areas in San Diego County and Baja Habitat: Dry slopes in coastal sage scrub between 10 and 1,476 ft	HP	Suitable Diegan coastal sage scrub occurs within the BSA. Would likely have been observed during rare plant surveys if present.
<i>Geothallus tuberosus</i>	Campbell's liverwort	--/-- CNPS List 1B.1	Distribution: San Diego and Riverside counties Habitat: Vernal pools and open sage scrub communities	HP	Diegan coastal sage scrub occurs within the BSA. Reported recently at Camp Pendleton; however, probably extirpated elsewhere in urbanized San Diego County (CNPS 2010).

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	Beach goldenaster	--/-- CNPS List 1B.1	Distribution: Coastal San Diego and Santa Barbara counties, Baja Habitat: Coastal chaparral, coastal dunes, coastal scrub	A	BSA does not support coastal dune or chaparral habitat and is likely located too far inland.
<i>Iva hayesiana</i>	San Diego marsh-elder	--/-- CNPS List 2.2	Distribution: San Diego County and Baja Habitat: Intermittent streambed creeks are preferred habitat for this shrub. Sandy alluvial embankments with cobbles are frequently utilized.	A	No suitable habitat within the BSA.
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	Southwestern spiny rush	--/-- CNPS List 4.2	Distribution: Los Angeles, San Bernardino, San Luis Obispo, Ventura, and San Diego counties; Baja Habitat: Moist, saline, or alkaline soils in coastal salt marshes and riparian marshes	A	No suitable wetland habitat occurs within the BSA.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	--/-- CNPS List 1B.1	Distribution: Kern and San Luis Obispo counties south through San Diego and Riverside counties and into Baja Habitat: Coastal salt marshes and vernal pool communities	A	No suitable habitat occurs within the BSA.
<i>Leptosyne (Coreopsis) maritima</i>	Sea dahlia	--/-- CNPS List 2.2	Distribution: San Diego County and Baja Habitat: Coastal bluff scrub	A	No suitable habitat occurs within the BSA.
<i>Monardella viminea</i>	Willow monardella	FE/SE CNPS List 1B.1 MSCP Covered	Distribution: San Diego County below 1,000 ft Habitat: Rocky washes generally associated with coastal sage scrub and chaparral	A	Diegan coastal sage scrub occurs within the BSA. Rocky streambed habitat suitable for this species is not present.
<i>Myosurus minimus</i> ssp. <i>apus</i>	Little mousetail	--/-- CNPS List 3.1	Distribution: San Bernardino, Riverside, and San Diego counties Habitat: Vernal pool communities	A	No vernal pools occur within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Navarretia fossalis</i>	Spreading navarretia	FT/-- CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Western Riverside through southwestern San Diego counties into Baja Habitat: Chenopod scrub, swamps, playas and vernal pools between 98 and 4,265 ft	A	Appropriate habitat does not occur within the BSA.
<i>Navarretia prostrata</i>	Prostrate navarretia	--/-- CNPS List 1B.1	Distribution: Alameda, Los Angeles, Merced, Monterey, Orange, Riverside, San Bernardino, and San Diego counties Habitat: Occurs in coastal scrub, valley and foothill grasslands with alkaline soil, and vernal pools	HP	No vernal pools occur within the BSA, but coastal sage scrub and grasslands are present. The habitat does not likely support suitable conditions for this species.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly-heads	--/-- CNPS List 1B.2	Distribution: Los Angeles, Orange, and San Diego counties and Baja Habitat: Coastal dune communities	A	Appropriate habitat does not occur within the BSA.
<i>Orcuttia californica</i>	California Orcutt grass	FE/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Riverside, San Diego, Ventura, and Los Angeles counties to Baja Habitat: In or near vernal pools. Tends to grow in wetter portions of vernal pool basins but does not show much growth until basins become somewhat desiccated.	A	Appropriate habitat does not occur within the BSA.
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	--/-- CNPS List 1B.2 MSCP NE MSCP Covered	Distribution: Occurs along the coast near Del Mar Habitat: Torrey pine woodlands and southern maritime chaparral	HP	Appropriate habitat occurs within the BSA.
<i>Pogogyne abramsii</i>	San Diego mesa mint	FE/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: San Diego County and Baja Habitat: Vernal pools between 295 and 656 ft	A	Vernal pools are not present within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT OR SPECIES PRESENT/ ABSENT†	RATIONALE
PLANTS (cont.)					
<i>Pogogyne nudiuscula</i>	Otay mesa mint	FE/SE CNPS List 1B.1 MSCP NE MSCP Covered	Distribution: Otay Mesa and northern Baja Habitat: Vernal pools on coastal mesas between 328 and 820 ft	A	Vernal pools are not present within the BSA.
<i>Quercus dumosa</i>	Nuttall's scrub oak	--/-- CNPS List 1B.1	Distribution: Santa Barbara, Orange, and San Diego counties into Baja Habitat: Chaparral and coastal sage scrub, generally with clay loam soils within coastal zone	HP	Suitable habitat occurs within the BSA.
<i>Senecio aphanactis</i>	Rayless ragwort	--/-- CNPS List 2.2	Distribution: In southern California, occurs in San Luis Obispo, Ventura, Los Angeles, Orange, Riverside, and San Diego counties Habitat: Coastal sage scrub and woodland communities	HP	Diegan coastal sage scrub occurs within the BSA.
<i>Sphaerocarpos drewei</i>	Bottle liverwort	--/-- CNPS List 1B.1	Distribution: Riverside and San Diego counties Habitat: Openings in chaparral and coastal sage scrub	HP	Diegan coastal sage scrub occurs within the BSA. Most reported locations are presumed eradicated.
WILDLIFE					
Invertebrates					
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE/-- MSCP Covered	Distribution: San Diego County Habitat: Inhabits vernal pools or basins capable of holding water	A	Vernal pools are not present within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates					
Amphibians and Reptiles					
<i>Cnemidophorus hyperythrus beldingi</i>	Orange-throated whiptail	--/SSC MSCP Covered	Distribution: Ranges from southern Orange County and southern San Bernardino County (Colton) south to the cape of Baja Habitat: Generally inhabits sandy substrates in coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Can also be found in weedy, disturbed areas adjacent to these habitats. Important requirements for orange-throated whiptail populations include a mosaic of open, sunny areas and shade for thermoregulation	HP	Diegan coastal sage scrub habitat occurs within the BSA.
<i>Phrynosoma coronatum blainvillei</i>	Coast horned lizard	--/SSC MSCP Covered	Distribution: Coastal California west of Sierra Nevada from the Bay Area south through southern Baja Habitat: Coastal sage scrub, chaparral, grassland, and woodlands up to 6,000 ft. Not common where Argentine ants (<i>Linepithema humile</i>) have excluded native harvester ants (<i>Pogonomyrmex</i> sp.)	HP	Suitable habitat (coastal sage scrub and grassland) occurs within the BSA, although habitat likely too patchy and urbanized to support species.
<i>Spea hammondi</i>	Western spadefoot	--/SSC	Distribution: Throughout the Central Valley and Bay Area south along the coast to northwestern Baja Habitat: Open coastal sage scrub, chaparral, and grassland along sandy or gravelly washes, floodplains, alluvial fans, or playas. Requires temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (<i>Rana catesbiana</i>) or crayfish (<i>Procambarus</i> sp.)	A	Appropriate habitat does not occur within BSA.
Birds					
<i>Accipiter cooperi</i>	Cooper's hawk	--/WL MSCP Covered	Distribution: Occurs year-round throughout San Diego County's coastal slope where stands of trees are present Habitat: Found in oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests	SP	Suitable habitat occurs within the BSA. Species was observed foraging over the BSA during surveys.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates (cont.)					
Birds (cont.)					
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	--/SSC MSCP Covered	Distribution: Ventura, Orange, Riverside, and San Diego counties into Baja Habitat: Found in coastal sage scrub and open chaparral communities	HP	Diegan coastal sage scrub occurs within the BSA.
<i>Athene cucularia</i>	Burrowing owl	--/SSC	Distribution: Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas Habitat: Restricted to essentially flat, open country with suitable nest sites within native or non-native grassland, open coastal sage scrub, and fallow agricultural fields	HP	Diegan coastal sage scrub and grasslands occur within the BSA. However, density of vegetation, small patch size and isolation of the habitat, hilly terrain, presence of predators, and distance from known occurrences in the region strongly reduce the potential for this species to occur. Sign of species would likely have been observed during surveys if present.
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover	FT/SSC MSCP Covered	Distribution: Coastal California from north of the Bay Area south into Baja Habitat: Inhabits sandy beaches, salt marshes, and alkaline lakes	A	No suitable habitat occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates (cont.)					
Birds (cont.)					
<i>Circus cyaneus</i>	Northern harrier	--/SSC MSCP Covered	Distribution: In San Diego County, distribution primarily scattered throughout lowlands but can also be observed in foothills, mountains, and desert Habitat: Open grassland and marsh	HP	Marginal grassland occurs within the BSA. This species could occasionally forage over portions of the BSA.
<i>Dendroica petechia brewsteri</i>	Yellow warbler	--/SSC	Distribution: Observed throughout much of San Diego County during the breeding season with rare sightings in winter Habitat: Riparian woodland	A	No riparian habitat occurs within the BSA.
<i>Elanus leucurus</i>	White-tailed kite	--/FP	Distribution: Coastal slopes of San Diego County Habitat: Riparian woodlands and oak or sycamore groves adjacent to grassland	A	No suitable habitat occurs within the BSA.
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	FE/-- MSCP Covered	Distribution: Occurs in San Diego County during the breeding season but is rare. Most breeding pairs occur along the upper San Luis Rey River or along the Santa Margarita River in Camp Pendleton, but scattered pairs or unpaired individuals have been observed elsewhere. Habitat: Mature riparian woodland	A	No riparian habitat occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates (cont.)					
Birds (cont.)					
<i>Falco mexicanus</i>	Prairie falcon	--/WL	Distribution: Observed year-round in San Diego County but more commonly during winter Habitat: Nesting occurs on cliff or bluff ledges or occasionally in old hawk or raven nests; foraging occurs in grassland or desert habitats	A	Marginal foraging habitat occurs within the BSA.
<i>Icteria virens</i>	Yellow-breasted chat	--/SSC	Distribution: Occurs throughout San Diego County's coastal lowlands in the breeding season Habitat: Mature riparian woodland	A	No riparian habitat occurs within the BSA.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	--/ST Fully Protected	Distribution: Historically known from the San Francisco Bay area and the delta of the Sacramento and San Joaquin rivers south along the coast to northern Baja as well as in San Bernardino and Riverside counties Habitat: Wetland habitats	A	Wetlands occur within the BSA. Presumed extirpated from San Diego County.
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	--/SE MSCP NE	Distribution: Santa Barbara County to northern Baja Habitat: Inhabits coastal salt marshes	A	Habitat that supports this species is not present within the BSA.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT/SSC MSCP Covered	Distribution: Southern Los Angeles, Orange, western Riverside, and San Diego counties south into Baja Habitat: Coastal sage scrub of varying subtypes, sometimes riparian (foraging and dispersal only), other habitats as well	SP	Two nesting pairs found in offsite coastal sage scrub during 2014 protocol-level surveys.
<i>Rallus longirostris levipes</i>	Light-footed clapper rail	FE/SE Fully Protected MSCP Covered	Distribution: Santa Barbara to San Diego counties and northern Baja Habitat: Inhabits extensive coastal salt and freshwater marshes containing cordgrass, cattails, or tules, and rushes	A	No suitable marsh habitat occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates (cont.)					
Birds (cont.)					
<i>Sterna antillarum browni</i>	California least tern	FE/SE MSCP Covered	Distribution: Migratory bird that winters in Latin America with unknown winter range and habitats. Nesting range is along the Pacific coast from San Francisco Bay to southern Baja Habitat: Inhabits bays and lagoons and forms breeding colonies in adjacent open sandy beaches, dunes, or disturbed sites along the coast	A	No suitable habitat occurs within the BSA.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE/SE MSCP Covered	Distribution: Riverside, San Diego, Santa Barbara, and Ventura counties into northern Baja Habitat: Inhabits riparian woodlands and riparian forests	A	No riparian habitat occurs within the BSA.
Mammals					
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	--/SSC	Distribution: Los Angeles County and southern San Bernardino County south into west-central Baja Habitat: Open areas of coastal sage scrub and weedy growth, often on sandy substrates	HP	Appropriate habitat (Diegan coastal sage scrub) and marginal soils occur within the BSA.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	--/SSC	Distribution: Ranges from southern Santa Barbara County south (on the coastal slope) to the vicinity of San Quintin, Baja Habitat: Inhabits open habitats, including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if some shrub cover is present.	HP	Diegan coastal sage scrub, grasslands, and disturbed areas occur within the BSA.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	--/SSC	Distribution: Coastal slope of southern California from San Luis Obispo County south into coastal northwestern Baja Habitat: Open chaparral and coastal sage scrub, often with large stick nests in rock outcrops or around clumps of cactus or yucca	HP	Appropriate habitat (Diegan coastal sage scrub) occurs within the BSA.

Appendix A
Table A-1 Regional Species of Concern (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS*	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT/ ABSENT†	RATIONALE
WILDLIFE (cont.)					
Vertebrates (cont.)					
Mammals (cont.)					
<i>Odocoileus hemionus</i>	Southern mule deer	--/-- MSCP Covered	Distribution: Southern Riverside County (Tahquitz Valley), south on the coastal slope to vicinity of San Quintin, Baja Habitat: Coastal sage scrub, riparian and montane forests, chaparral, grasslands, croplands, and open areas if there is at least some scrub cover present. Crepuscular activity and movements along routes that provide greatest amount of protective cover.	HP	Appropriate habitat (Diegan coastal sage scrub and grasslands) occurs within the BSA. Although not detected during surveys, there are records of this species in the vicinity of the BSA.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE/SSC	Distribution: Between 1894 and 1972, the subspecies was recorded from eight general locales from Los Angeles County south to the Mexican border in San Diego County. Only three populations are known to be extant today: one at the Dana Point Headlands in Orange County and two on Camp Pendleton in San Diego County. The subspecies occurs within approximately 2.4 mi inland of the Pacific Ocean and has not been reliably recorded above 600 ft in elevation (Erickson 1993). Habitat: Fine-grained, sandy or gravelly substrates in coastal strand, coastal dunes, river alluvium, and coastal sage scrub growing on marine terraces	HP	Appropriate habitat (Diegan coastal sage scrub) and marginal soils occur within the BSA. However, the BSA does not support coastal stand, coastal dune, or coastal sage scrub growing on marine terraces. Further, the species is presumed to be extirpated from the local area and the BSA does not occur in close proximity to known occurrences in the region.

*FE = Federally listed endangered. FT = Federally listed threatened. SE = State listed endangered. ST = State listed threatened. SSC = State species of special concern. WL = Watch list. Fully Protected = State fully protected.

CNPS List 1B = Rare, threatened, or endangered in California and elsewhere, eligible for state listing. List 2 = Rare, threatened, or endangered in California but more common elsewhere, eligible for state listing. List 3 = Distribution, endangerment, ecology, and/or taxonomic information needed, some eligible for state listing. List 4 = A watch list for species of limited distribution, needs monitoring for changes in population status, few (if any) eligible for state listing.

MSCP Covered = Species for which the City has take authorization within the MSCP area. MSCP NE = Narrow endemic species are native species that have “restricted geographic distributions, soil affinities, and/or habitats.” The MSCP participants’ subarea plans have specific conservation measures to ensure impacts to narrow endemics are avoided to the maximum extent practicable.

‡ABSENT (A) = suitable habitat is absent. HABITAT PRESENT (HP) = suitable habitat is present. SPECIES PRESENT (SP) = species is present based on survey results and/or other data.

SOURCE: CDFW 2014. *The list of species included in this table is based on database queries for areas within approximately 5 miles of the BSA, including selected results from the Del Mar and La Jolla, California USGS 7.5 Minute Quadrangles.*

Appendix A			
Table A-2 Regional Habitats of Concern			
NATURAL COMMUNITY	GLOBAL RANKING	STATE RANKING	HABITAT PRESENT OR ABSENT
Southern Maritime Chaparral	G1	S1.1	Absent
San Diego Mesa Hardpan Vernal Pool	G2	S2.1	Absent
Southern Coastal Salt Marsh	G2	S2.1	Absent
Southern Riparian Forest	G4	S4	Absent
Southern Cottonwood Willow Riparian Forest	G3	S3.2	Absent
Southern Riparian Scrub	G3	S3.2	Absent
Torrey Pine Forest	G1	S1.1	Absent

SOURCE: CDFW 2014. *The list of natural communities included in this table is based on database queries for areas within approximately 5 miles of the BSA, including selected results from the Del Mar and La Jolla, California USGS 7.5 Minute Quadrangles.*

Global Rankings

- G1** = Less than 2,000 acres exist worldwide.
- G2** = Approximately 2,000 to 10,000 acres exist worldwide.
- G3** = Approximately 10,000 to 50,000 acres exist worldwide.
- G4** = Community is secure worldwide, but factors exist to cause some concern.

State Rankings

- S1.1** = Considered very threatened in California; less than 2,000 acres exist statewide.
- S2.1** = Considered very threatened in California; approximately 2,000 to 10,000 acres exist statewide.
- S3.2** = Considered very threatened in California; approximately 10,000 to 50,000 acres exist statewide.
- S4** = Community is secure statewide, but factors exist to cause some concern.



Appendix B

REPRESENTATIVE SITE PHOTOS





Photo 1: Disturbed habitat located within the project site, north of State Route 56, looking south. Project construction would be contained within disturbed and developed areas at this location.



Photo 2: Disturbed habitat located within the project site, north of State Route 56, looking northeast. Project construction would be contained within disturbed and developed areas at this location.



Photo 3. Diegan coastal sage scrub located immediately offsite and within the northern and northwestern portions of the BSA, north of State Route 56, looking northwest. The project would avoid direct disturbance to these offsite areas.



Photo 4: South-facing view of developed land within Caltrans right-of-way for State Route 56 and further south, looking south, where proposed bridge overpass will be constructed.

G/PROJECTS/T/TYL-05 Torrey Meadows/BIO/NESMI/Appendices/Appx B photo pages

Representative Site Photos

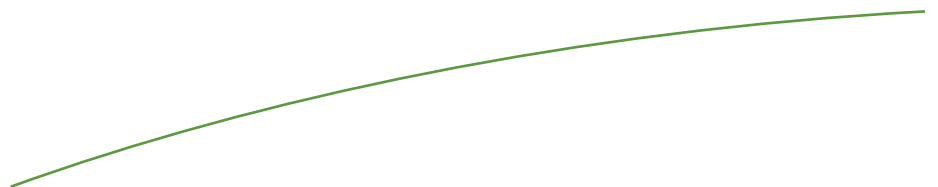
TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56

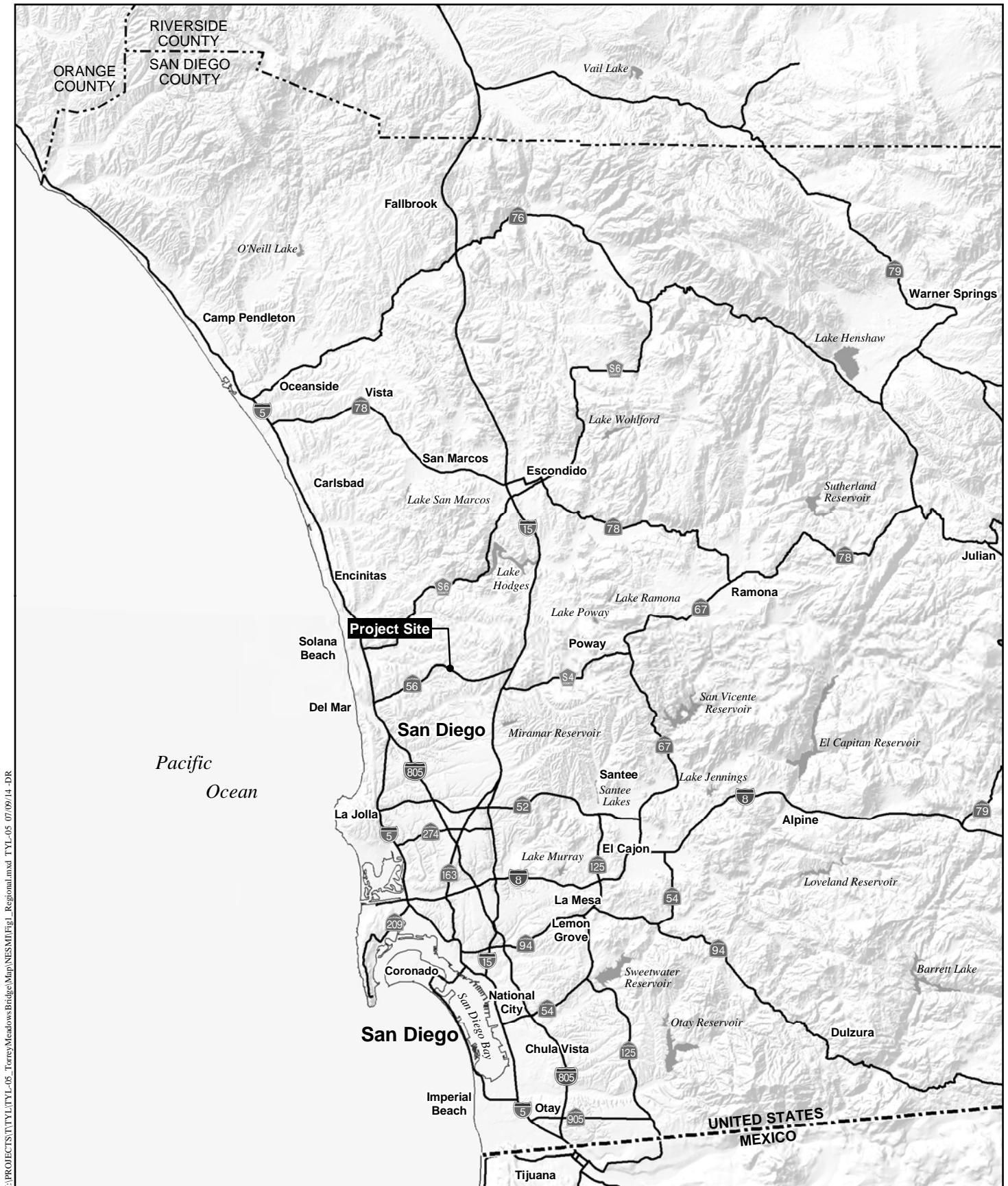
Appendix B



Appendix C

FIGURES 1 THROUGH 8

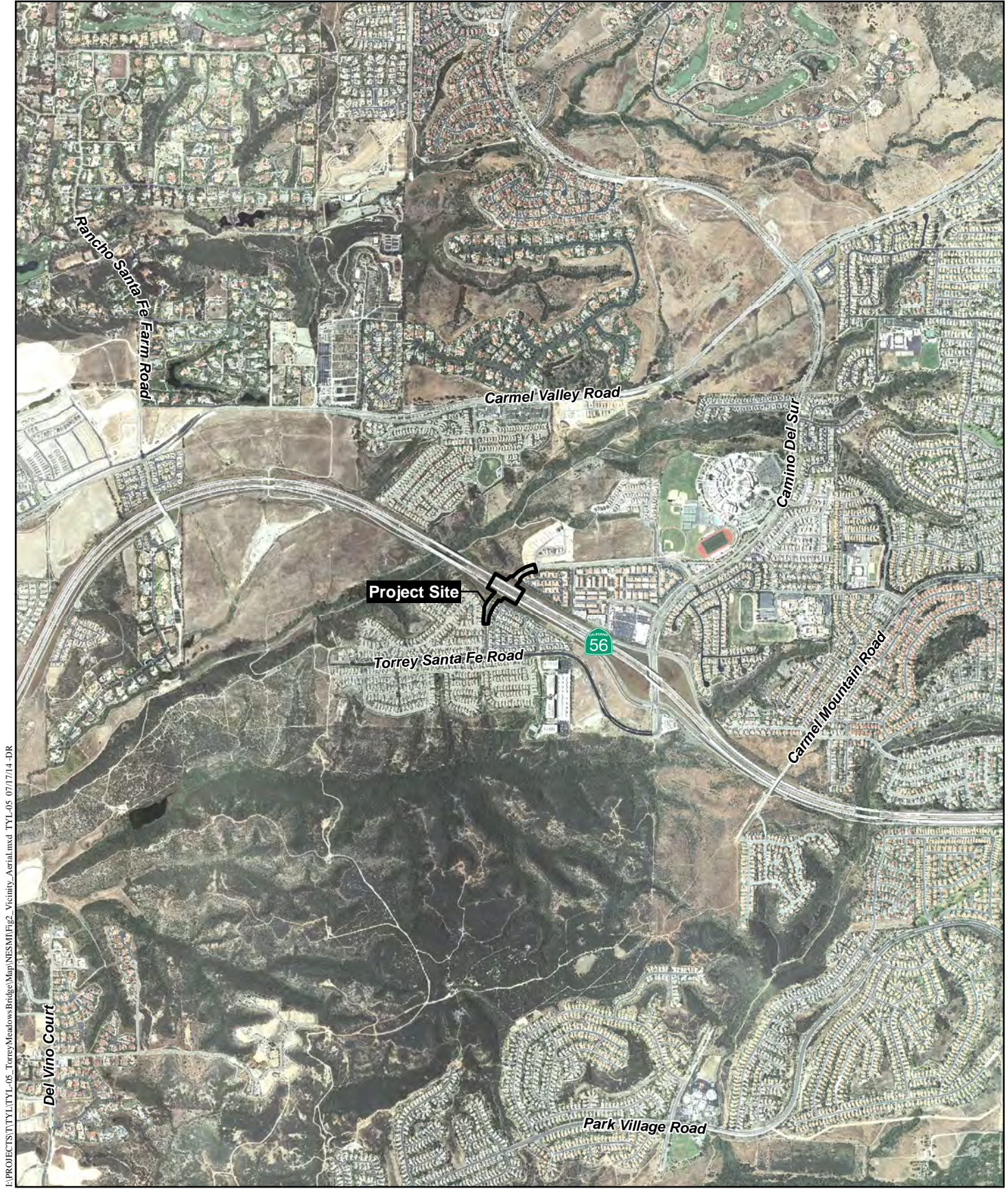




E:\PROJECTS\TYL\TYL-05_TorreyMeadowsBridge\Map\NESM\Fig1_Regional.mxd TYL-05 07/09/14 -DR

Regional Location Map

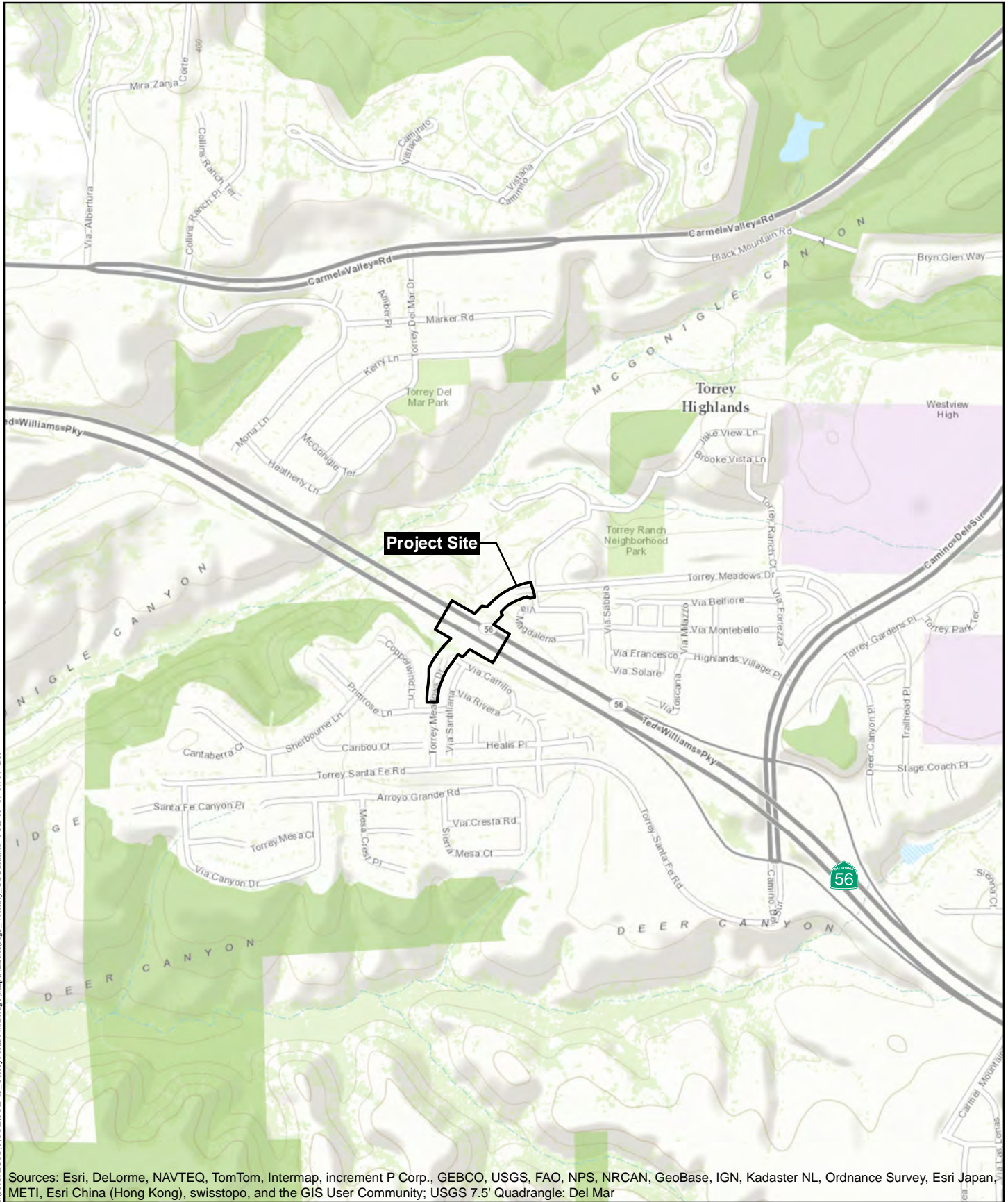
TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56



F:\PROJECTS\TYL\TYL-06_TorreyMeadowsBridge\Map\NESM\Fig2_Vicinity_Aerial.mxd TYL-05 07/17/14 -DR

Project Location Map

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56



Project Vicinity Map (US Topography)

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56

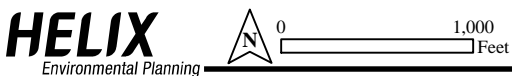


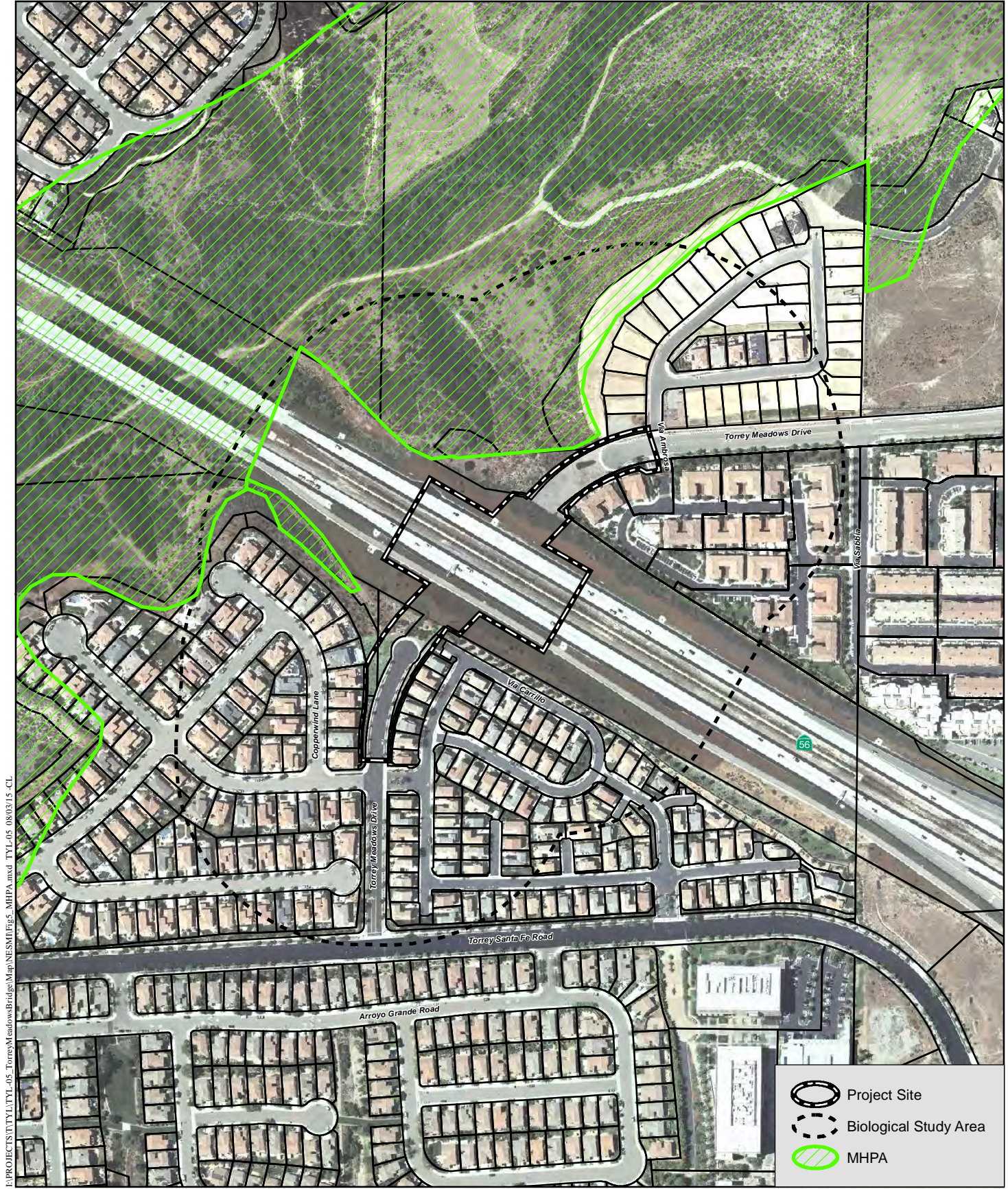
Figure 3



I:\PROJECTS\TYL\TYL-05_TorreyMeadowBridge\Map\NEM\Fig4_BSA.mxd_TYL-05_07/17/14_DR

Biological Study Area

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56



I:\PROJECTS\TYL\TYL-05_TorreyMeadowsBridge\Map\NESM\Fig5_MHPA.mxd TYL-05 08/03/15-CL

Project with MHPA Boundary

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56



I:\PROJECTS\TYL\TYL-05_Torrey Meadows Bridge\Map\NESM\Fig6a_ProjectPlans.mxd TYL-05 11/20/13-DR

Project Plans

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56

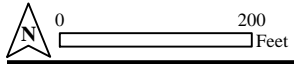
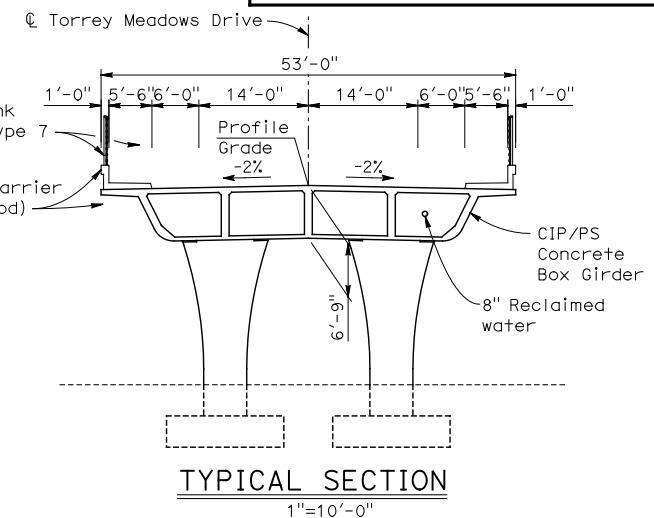
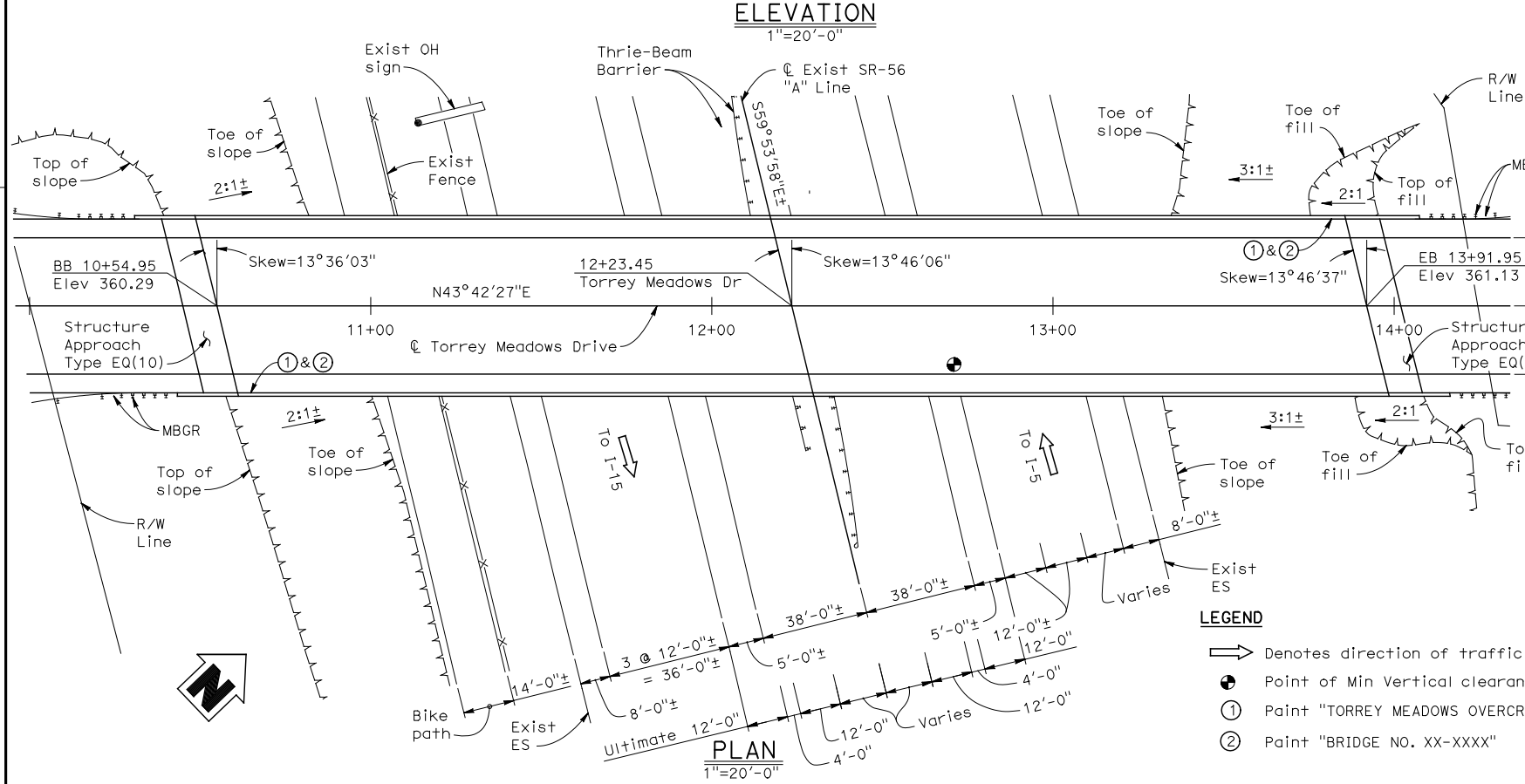
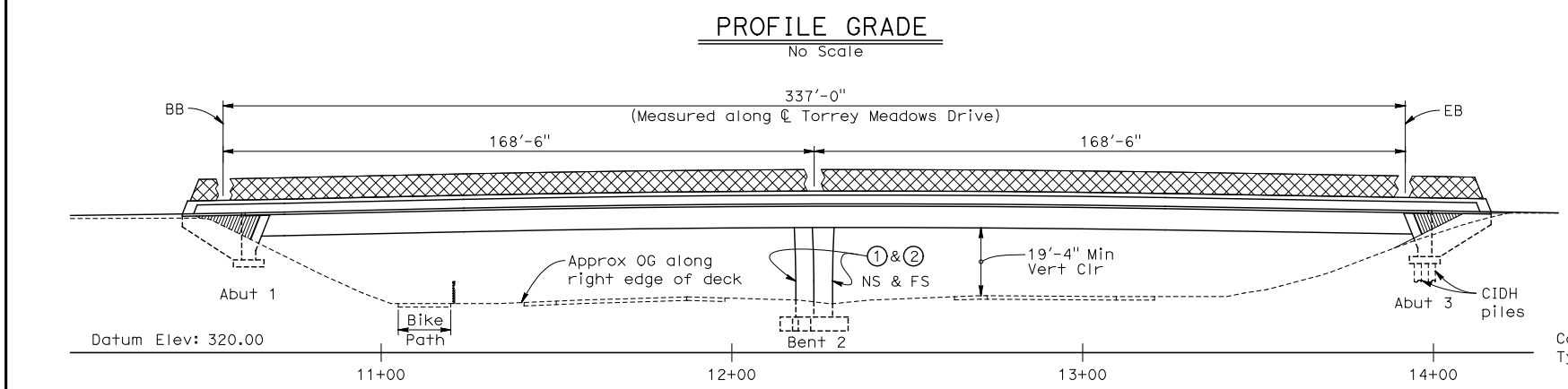
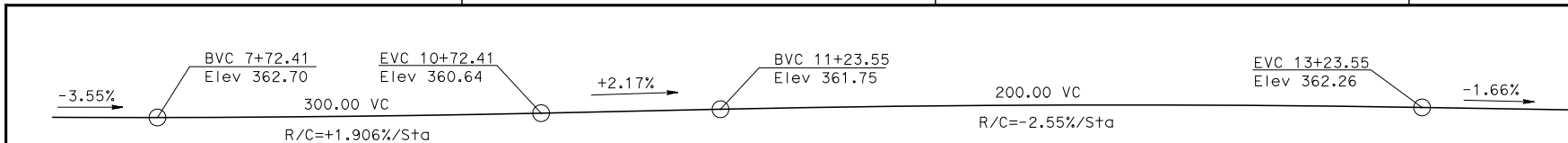


Figure 6a



Vehicular Traffic

- N/A New alignment. No traffic at the site.
- N/A Traffic will be detoured away from the site.
- N/A Traffic will be carried on the structure. Stage construction will/will not be required.
- X Traffic will pass under the structure on SR-56 (Name of St. or Hwy.)
 - N/A No falsework allowed over traffic.
 - X Falsework opening(s) required:

	Temporary Vertical Clearance	Width of Traffic Opening
E Bnd	15'-0"	49'-0"
W Bnd	15'-0"	49'-0"
N/A Two-way	N/A	N/A
 - N/A Temporary traffic lane reduction needed for footing excavation.

Pedestrian Traffic

Falsework opening required on Bike path (Name of St.)

Location	Height	Width
Span 1	12'-0"	20'-0"

- LEGEND**
- ➔ Denotes direction of traffic
 - Point of Min Vertical clearance
 - ① Paint "TORREY MEADOWS OVERCROSSING"
 - ② Paint "BRIDGE NO. XX-XXXX"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
11	SD	56	XX.X		

REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

CITY OF SAN DIEGO
1010 SECOND AVENUE, SUITE 1100
SAN DIEGO, CA 92101

T.Y. LIN INTERNATIONAL
5030 CAMINO DE LA SIESTA, SUITE 204
SAN DIEGO, CA 92108

DESIGN OVERSIGHT	DESIGN BY Jim Rucker	CHECKED	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY Ivan Martin	CHECKED	LAYOUT BY Ivan Martin	PROJECT ENGINEER
QUANTITIES	BY	CHECKED	SPECIFICATIONS BY	PLANS AND SPECS COMPARED

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 06-01-09)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

CU XXXXX
EA XXXXXX
FILE => #REQUEST

BRIDGE NO. 57-XXXX

POST MILES XX.X

TORREY MEADOWS DRIVE GENERAL PLAN

REVISION DATES (PRELIMINARY STAGE ONLY)

DATE	DESCRIPTION

SHEET 1 OF XX

I:\PROJECTS\TYL\TYL-05_Torrey Meadows Bridge\Map\NESM\Fig06_ProjectPlan.incl TYL-05 11/20/13-IP

User: imartin Date: 3/30/2010 Time: 02:23:58 AM File: I:\Projects\701118_torrey_meadows_drive.dgn\701118-a-gp01.dgn

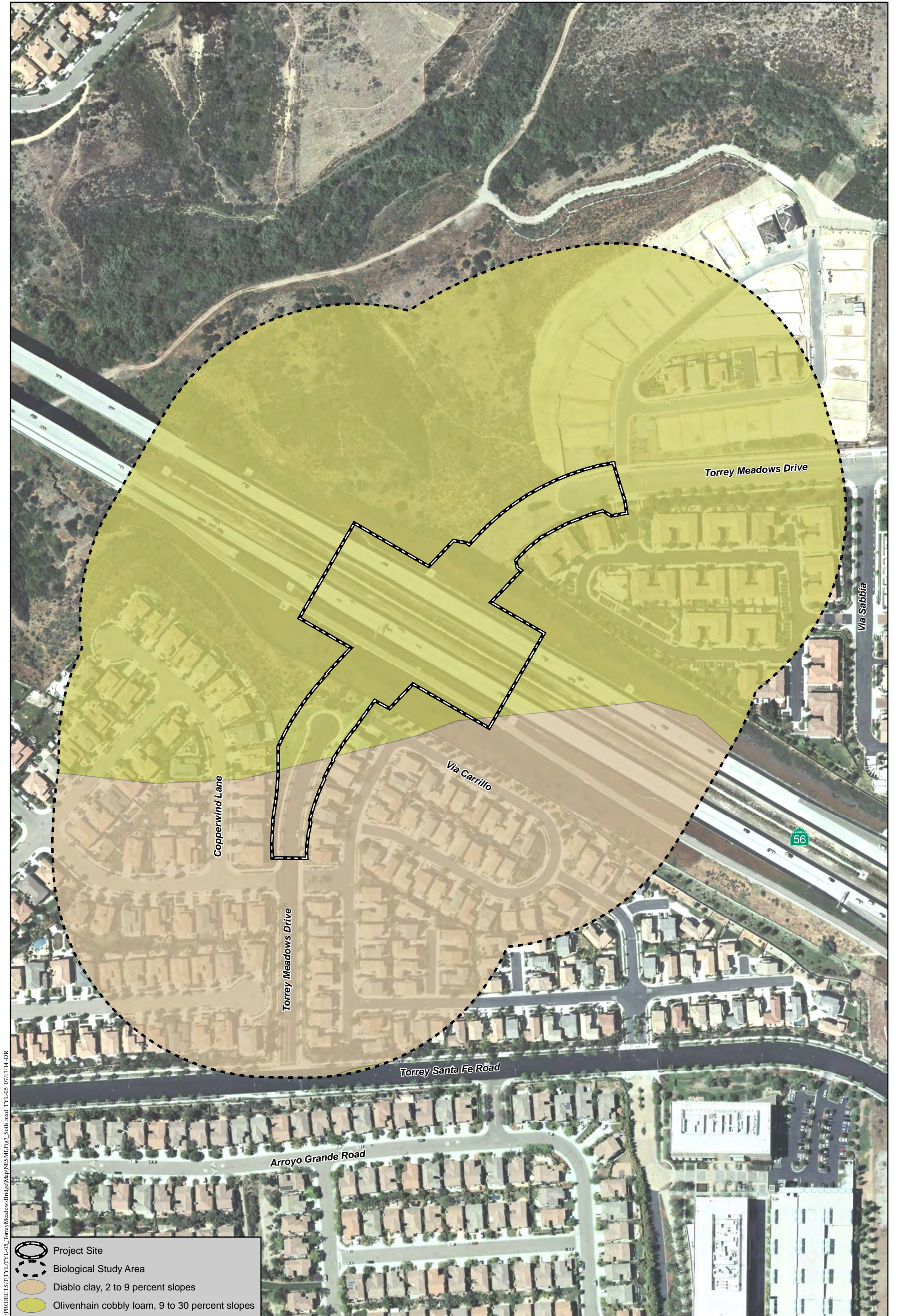
DATE PLOTTED => #DATE USERNAME => #USER TIME PLOTTED => #TIME

Source: Caltrans 2013

Project Plans

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56

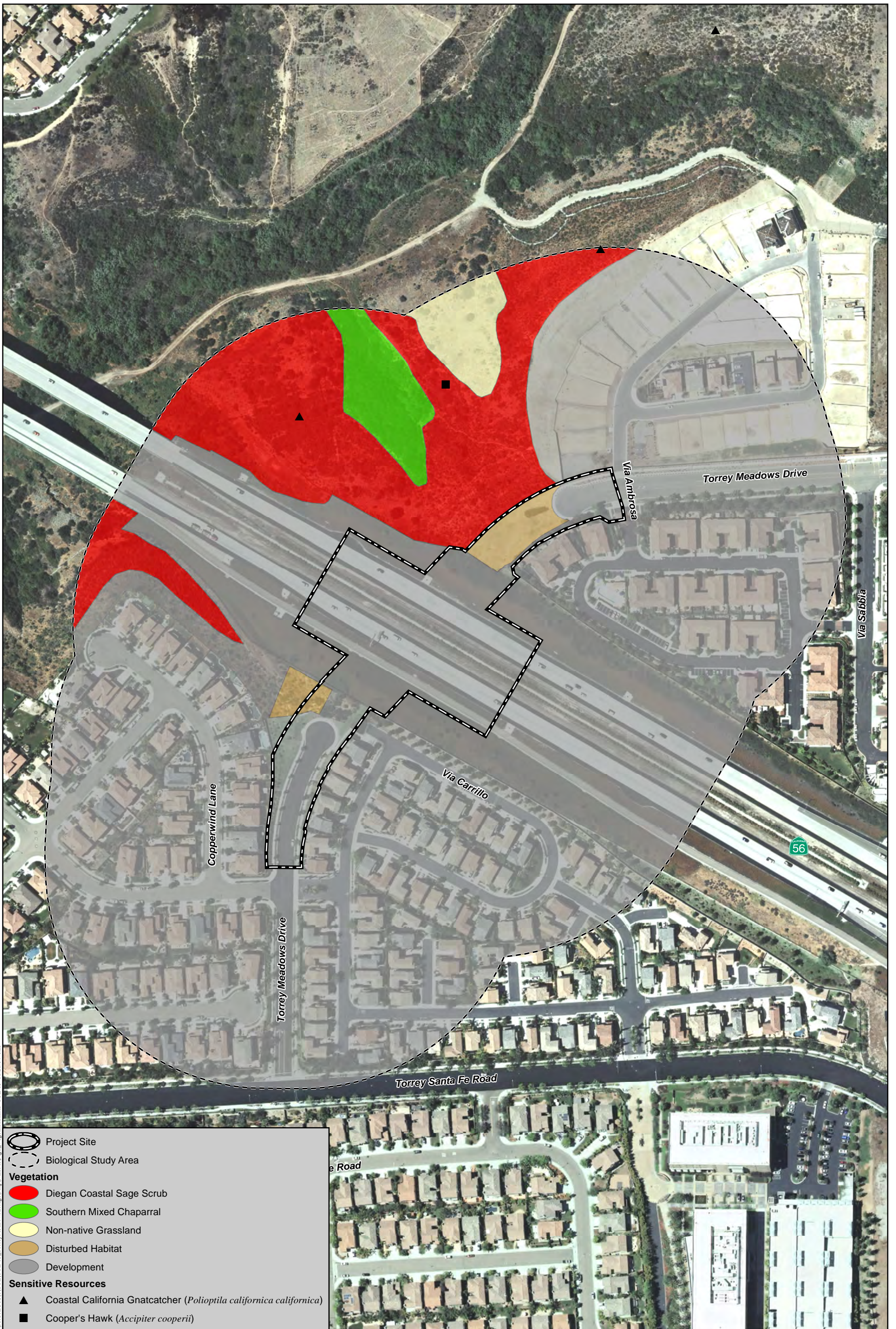
Figure 6b



I:\PROJECTS\TYL\TYL-05_TorreyMeadowBridge\Map\NEMM\Fig.7_Soils.mxd TYL-05_071714-DR

Soils

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56



Vegetation and Sensitive Resources

TORREY MEADOWS DRIVE OVERCROSSING AT STATE ROUTE 56