Section 2.3

BIOLOGICAL RESOURCES

2.3 Biological Resources

Biological resources are addressed in Section 4.3 of the EOMSP Final EIR. This analysis concluded that the EOMSP would have significant, direct and indirect impacts related to six vegetation communities (Diegan coastal sage scrub, grassland, southern interior cypress forest, wetlands, vernal pools, and rock outcrop/bedrock), six sensitive animal species (western spadefoot toad [*Spea hammondii*], California gnatcatcher [*Polioptila californica californica*], burrowing owl [*Athene cunicularia*], raptors, Riverside fairy shrimp [*Streptocephalus wootoni*] and vernal pool fairy shrimp [*Branchinecta lynchi*]), and 11 sensitive plant species (golden-spined cereus [*Bergerocactus emoryi]*, Orcutt's brodiaea [*Brodiaea orcuttii*], Dunn's mariposa lily [*Calochortus dunnii*], Tecate cypress [*Cupressus forbesii*], variegated dudleya [*Dudleya variegate*], San Diego button-celery [*Eryngium aristulatum* var. *parishii*], Otay tarplant [*Deinandra conjugens*], San Diego marsh elder [*Iva hayesiana Gray*], Cleveland's golden star [*Muilla clevelandii*], little mousetail [*Myosurus minimus* ssp. *apus*], and prostrate navarretia [*Navarretia prostrata*]). The EOMSP stated that each individual tentative map shall be reviewed for consistency with the mitigation strategies outlined in the EOMSP. The relevant strategies are summarized as follows:

- On-site preservation of sensitive habitat shall be the first mitigation priority. A secondary option is mitigation through preservation, restoration or creation. Mitigation ratios shall be determined based on the quality of impacted habitat. Preservation shall occur within or adjacent to large open space areas or preserves, where feasible, and shall be dedicated to the County. Mitigation shall occur in the regional vicinity, if possible. Revegetation shall be limited to native species, conducted in the rainy season, and shall be appropriately buffered. Irrigation shall only be used for establishment purposes.
- The use of invasive, non-native plant species shall be prohibited. If native species are used in landscaping that could breed with native species in the vicinity, genetic contamination shall be avoided through the use of plants that are propagated from material collected in the vicinity.
- Project design shall incorporate appropriate features to ensure that the amount of project-related runoff remains constant between pre- and post-project implementation. Erosion during construction shall be decreased through scheduling during the dry season, revegetating graded areas and other standard erosion control methods.
- Sensitive animal species impacts can be adequately mitigated through habitat mitigation. Avoidance measures include pre-construction surveys and scheduling construction outside of the breeding season. Mitigation shall depend on the sensitivity of the species, and the quality and quantity of impacted species habitat. Purchase and preservation of appropriate habitat shall be conducted within areas know or expected to support the impacted species. Habitat preservation is preferred over creation.
- Staging areas are prohibited within sensitive habitat areas or any habitats included in open space. Staging areas shall be delineated on the grading plans.
- Construction in or adjacent to sensitive areas should be appropriately scheduled to minimize potential impacts.

The indirect noise mitigation measures directed at biological resources included in the EOMSP are the following:

> 8A. Noise sensitive land use, including existing and proposed residences and all California gnatcatcher habitat, located within the estimated 60 db CNEL noise contour shall have a site specific noise studies prepared prior to approval of discretionary permits. Siting of industrial and commercial uses shall be such that adequate setbacks are created to minimize off-site noise impacts to sensitive receptors.
>
> 8C. All construction operations shall comply with the San Diego County Noise Ordinance (Section 36.410). All construction operations scheduled to occur within 1,500 feet of California gnatcatcher habitat shall prepare a project-specific noise mitigation and monitoring program to demonstrate compliance with established noise standards.

In 2002, Specific Plan Amendment 00-005 identified the proposed project site was identified within the South County Segment of the MSCP and development on the proposed project site was indicated to require an MSCP Minor Amendment.

The *Environmental Review Update Form for Projects with Previously Approved Environmental Documents* prepared for the proposed project indicates that no new impacts to sensitive species would occur that were not identified in the EOMSP. However, the proposed project would be required to adhere to the mitigation measures set forth by the EOMSP, as amended.

This section is based, in part, on information and conclusions reached in the previously certified EOMSP (as amended) as well as the project-level analysis contained in the Biological Impact Analysis Report for California Crossings prepared by HELIX Environmental Planning, Inc. (HELIX) in 2010a (and contained in Appendix E.1 to this SEIR). This report also includes information from earlier survey work completed by Merkel & Associates in 2006 and 2007. Also, an Enhancement Plan (HELIX 2010b) was prepared to address initial efforts to promote use of the off-site mitigation parcel by burrowing owls; the plan is included as Appendix E.2 to this SEIR.

2.3.1 Existing Conditions

The following analysis addresses biological resources that are located within the project limits (on site) as well as areas outside of the site plan area (off site) that would be disturbed in the course of grading. The combined area of on- and off-site disturbance is referred to as the "study area," which covers a total of 34.0 acres.

Habitat Communities

The project site supports three habitat communities: non-native grassland, non-native vegetation, and disturbed lands. In addition, the off-site impact area includes urban/developed habitat (Table 2.3-1, *Existing Vegetation and Vegetation Impacted,* and Figure 2.3-1, *Biological Resources*). Each community is discussed within this section, including dominant flora species (where

appropriate), location, and general conditions. No wetlands or streambeds were identified within the survey area.

Non-native Grassland

A total of 22.2 acres of non-native grassland occurs within the study area. The grassland is comprised of non-native plant species such as slender wild oat (*Avena barbata*), black mustard (*Brassica nigra*), and ripgut grass (*Bromus diandrus*). Additional on-site, non-native grassland flora species include prickly sow thistle (*Sonchus asper*), tocalote (*Centaurea melitensis*), Italian ryegrass (*Lolium multiflorum*), red-stem filaree (*Erodium cicutarium*), white stem filaree (*Erodium moschatum*), and tumbleweed (*Amaranthus albus*). The floral diversity of this community is low and its vegetative structure is monotypic, herbaceous, and one to three feet in height.

Non-native grassland sensitivity varies depending upon location, wildlife use, and composition. They serve as foraging habitat for numerous raptors and their edges are utilized by insectivorous passerines and foraging mammals. Specifically, the non-native grasslands within the study area has increased wildlife value because it is contiguous with a large tract of non-native grasslands in an undeveloped area and it is used for raptor foraging. Overall, non-native grassland value within the study area is high for raptors, but low relative to non-avian species, general wildlife movement, and flora. The County considers non-native grassland as a Tier III habitat.

Non-native Vegetation

Approximately 0.4 acre of non-native vegetation is found in the southwest portion of the study area. This area is dominated by mission prickly pear/Indian-fig (*Opuntia ficus-indica*) and mulberry trees (*Morus* sp.). The mulberry trees (approximately 15 feet in height) and non-native 5- to 8-foot cacti appear to have been planted as part of the previous agricultural/vegetable stand operations. The diversity of this community is extremely low (two non-native dominant species), increased only by the occasional invading non-native grassland flora species.

Non-native vegetation is not sensitive and typically has low wildlife value, except where it supports numerous or sensitive nesting avian species. There is no evidence of nesting sensitive species, and the non-native vegetation is found in close association with a previously disturbed dirt lot. Thus, this community is considered to have low habitat and conservation values. The County does not assign a “tier” rating to non-native vegetation.

Disturbed Habitat

A total of 9.2 acres of the site is classified as disturbed habitat within the study area. On-site disturbed areas have been denuded of native or naturalized vegetation due to repetitive off-road vehicle use.

Disturbed habitat generally does not provide much in the way of wildlife value. While disturbed areas may be used as dust bathes for kangaroo rats and passerines, they have no substantive

wildlife value beyond that. Disturbed habitat does not have conservation value unless restored. The County considers disturbed habitat as a Tier IV habitat.

Urban/Developed

Urban/developed land covers 2.2 acre of the study area and consists entirely of the construction areas for SR-125, which occurs on the western side of the study area. The County does not assign a "tier" rating to urban/developed land.

Observed Plant Species

The study area is dominated by non-native flora. A total of 56 species were observed. The majority of the study area is dominated by non-native weedy vegetation including ripgut grass, slender wild oat, and black mustard.

Observed or Detected Animal Species

Animal species observations or detections within the study area were fairly limited due to the lack of cover for wildlife and the historical agricultural and off-road vehicle use of the study area. A total of 51 animal species were observed or detected within the study area. Below is a partial list of the observed or detected animal species. Please refer to Appendix B of the Biological Technical Report (Appendix E.1) for a complete list.

The butterflies that were observed during study area surveys included desert (Felder's) orangetip (*Anthocharis cethura*), cabbage white (*Pieris rapae*), painted lady (*Vanessa cardui*), and common buckeye (*Junonia coenia).* Most of the species were recorded both in the non-native grassland and disturbed vegetation communities.

No amphibians were observed within the study area.

The reptile species observed included western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicarinata*), and southern pacific rattlesnake (*Crotalus oreganus helleri*).

The bird species observed included turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), (common) barn owl (*Tyto alba*), white-throated swift (*Aeronautes saxatalis*), western kingbird (*Tyrannus verticalis*), Say's phoebe (*Sayornis saya*), California horned lark (*Eremophila alpestris actia*), northern-rough winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), grasshopper sparrow (*Ammodramus savannarum*), song sparrow (*Melospiza melodia*), blue grosbeak (*Passerina caerulea*), red-winged blackbird (*Agelaius phoeniceus*), western meadowlark (*Sturnella neglecta*), and house finch (*Carpodacus mexicanus*). It is expected that a wide variety of passerine and raptorial birds utilize this site throughout the year due to the presence of the non-native grasslands.

Relatively few mammalian species were observed or detected; however, this is expected, as most native mammal species are primarily nocturnal and not easily observed during diurnal surveys or in the absence of small mammal surveys. Desert cottontail (*Sylvilagus audubonii*) was the only mammal species observed/detected. Coyote (*Canis latrans*) signs indicated this species utilizes the study area.

Sensitive Biological Resources

Habitat Communities

Of the four habitat communities within the study area, only non-native grassland is considered sensitive by the County. Non-native vegetation, disturbed habitat, and urban/developed habitat are not considered sensitive habitat communities. No wetlands or streambeds exist within the study area.

Plant Species

Sensitive species are those considered sensitive by the County, or any state or federal agency. For the purposes of this report, species listed as endangered or threatened under the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA); species designated as State Species of Special Concern or Fully Protected species by the California Department of Fish and Game (CDFG); and species listed as sensitive by the County are considered "sensitive". Species considered rare by the California Native Plant Society (CNPS) or as Special Plants or Animals in the California Natural Diversity Database (CNDDB), may be considered "sensitive" if they meet the CEQA Guidelines §15380 (Title 14, Chapter 3, Article 20) definition for "endangered, rare or threatened species" or the Biological Mitigation Ordinance (BMO, County 2004b) (§86.508) definition of "sensitive species".

Five rare plant surveys were completed between April 2006 and July 2008 to determine if any of the sensitive plants with potential to occur or any other sensitive plant species exist within the study area. The results of the sensitive plant surveys of the study area were negative. Therefore, no rare or sensitive plants are expected to occur within the study area.

Animal Species

Protocol surveys for Quino checkerspot butterfly in 2006 and 2008 were negative. No federal or state listed animal species were observed/detected within the study area.

Eight sensitive animal species were observed/detected within the study area including: grasshopper sparrow (*Ammodramus savannarum*), turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus)*, and common barn owl (*Tyto alba*). Of these, six are County Group 1 Species: turkey vulture, northern harrier, grasshopper sparrow, white-tailed kite**,** prairie falcon, and loggerhead shrike. Two sensitive animal species found within the study area are County Group 2 Species: barn owl and California horned lark. The locations of these species are illustrated on Figure 2.3-1.

(Raptor species were observed within the study area as "fly-overs"; therefore, they are not represented by points in Figure 2.3-1.)

In 2006, Merkel and Associates observed a burrowing owl (*Athene cunicularia*) within pipes located adjacent to the SR-125 right of way during construction of SR-125. Construction is complete and SR-125 is in operation. The area where the pipes and owl were observed is now developed. This species was not observed or detected by HELIX biologists during 2008 surveys. Based on the negative survey results from three separate surveys, the study area is not considered to be occupied by the burrowing owl. While it is possible that owls in the vicinity could fly over and forage within the study area, no owls or sign of occupation (owls, burrows, feathers, droppings, or pellets) were observed in any of the biological surveys conducted within the study area since 2006.

One turkey vulture was observed flying over the study area. This species is found in open habitats with protected large trees, snags, rock outcrops, or cliffs for nesting. No suitable breeding habitat exists within the study area. However, this species may occur in highly variable numbers within the study area, depending upon scavenging (foraging) opportunities.

A male northern harrier was observed flying over the study area. There was no evidence of this species nesting within the study area or within 100 feet of the study area; however, the study area does appear to be utilized for foraging, at least during migration.

Horned larks (five individuals) were observed along the dirt road in the northwestern portion of the study area. There was no evidence of horned lark breeding within the study area, but they are expected to breed in the vicinity, based on the timing of the observations.

Grasshopper sparrows were observed along the north side of the study area within non-native grasslands (two to four individuals). The study area population of grasshopper sparrows is not expected to be substantial due to the limited availability of suitable grassland habitat, but they are breeding on or immediately adjacent to the site.

In terms of unobserved, but potentially present, sensitive fauna, a number of sensitive raptors are expected to occasionally utilize the site as well as loggerhead shrike (*Lanius ludovicianus*). These are the only species with reasonably high potential for occurrence, based on the lack of a wildlife corridor and the absence of features such as riparian habitat, rock outcrops, or sage scrub, which support many of the regions sensitive species. Table 3 in Appendix E.1 provides a listing of the sensitive species detected and those considered for occurrence potential due to their range and habitat preferences.

Habitat Connectivity and Wildlife Corridors

Two types of wildlife corridors commonly exist: local and regional. Local corridors provide animals with access to resources such as food, water, and shelter. Animals can use these corridors (such as the hillsides and tributary drainages to the main drainage within the study area) to travel from riparian to upland habitats and back. Regional corridors allow for animal

movement between large core areas of habitat that are regionally important. They include major creeks and rivers, ridges, valleys, and large swaths of undeveloped land.

The study area is located on Otay Mesa, and is bordered by SR-125, Otay Mesa Road, Harvest Road, and undeveloped land. The study area does not support riparian habitat or native vegetation, and only three mammals were observed/detected within the study area. The study area does not qualify as a Biological Resource Core Area (BRCA) under the County's Biological Mitigation Ordinance (BMO). In addition, the study area is not within or adjacent to a preserve area. Given this information, the study area does not provide habitat connectivity or act as local or regional wildlife corridors.

Regulatory Framework

Biological resources are subject to regulatory review by the federal government, State of California and County. The federal government administers non-marine plant- and wildlife-related issues through the United States Fish and Wildlife Service (USFWS), while wetlands and Waters of the U.S. issues are administered by the U.S. Army Corps of Engineers (Corps). California law relating to wetland, water-related, and wildlife issues is administered by the California Department of Fish and Game (CDFG). The County's review includes project consistency with local ordinances and regulations.

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) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a '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.

The USFWS identifies critical habitat for threatened and endangered species. Critical habitat is defined as areas of land considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No portion of the site is designated or proposed critical habitat.

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA, USFWS 1918), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127, USFWS 2004). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during

the nesting season (generally February 1 to July 30). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

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. California ESA Section 2081 authorizes the CDFG to enter into a memorandum of agreement for the take of listed species for scientific, educational, or management purposes.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California ESA follows the NPPA and covers both plants and animals designated as endangered or threatened with extinction. Plants listed as rare under NPPA also were designated rare under the California ESA.

County of San Diego

The study area occurs within the Minor Amendment Area of the South County Segment of the County's MSCP Subarea Plan. Minor Amendment Area properties contain habitat that could be partially or completely eliminated (with appropriate mitigation) without significantly affecting the overall goals of the County's MSCP Subarea Plan (County 1997). While not considered important to the MSCP preserve design, these Minor Amendment Areas must go through the amendment process if sensitive resources covered by the plan would be impacted. MSCP take authorizations do not apply to the study area until the project has successfully gone through the minor amendment process. In addition to County approval, the minor amendment process requires approval of the USFWS Field Office Supervisor and CDFG National Community Conservation Planning (NCCP) Program Manager.

The MSCP has been prepared to meet the requirements of the California NCCP, federal ESA (USFWS 1973), and California ESA. It is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve. The County's MSCP Subarea Plan (County 1997) implements the MSCP within the unincorporated areas under County jurisdiction.

The BMO is the mechanism by which the County implements the County MSCP Subarea Plan at the project level within the unincorporated area to attain the goals set forth in the County MSCP Subarea Plan. The BMO contains design criteria and mitigation standards that, when applied to projects requiring discretionary permits, protect habitats and species and ensures that a project does not preclude the viability of the MSCP Preserve System. In this way, the BMO promotes the preservation of lands that contribute to contiguous habitat core areas or linkages. As stated above, under the BMO definition, the habitat located within the study area does not qualify as a BRCA.

2.3.2 Analysis of Project Effects and Determination as to Significance

2.3.2.1 *Habitat*

Guidelines for the Determination of Significance

The following guidelines used to determine significance are based on the County of San Diego Guidelines for Determining Significance and Report and Content Requirements- Biological Resources (second revision July 30, 2008).

The proposed project would result in significant, direct impacts related to sensitive habitat if it would:

1. Result in construction, grading, clearing, construction, or other activities that would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 [in the County Biological Guidelines], excluding those without a mitigation ratio) on or off the project site.
2. Impact jurisdictional wetlands and/or riparian habitats, as defined by the Corps, CDFG, and County through: vegetation removal; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; road crossing construction; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
3. Draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
4. Increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect sensitive habitats.
5. Not provide adequate wetland buffer to protect the functions and values of existing wetlands.

Analysis

Direct Impacts to Biological Resources (Guidelines 1 and 2)

The proposed project would directly impact all habitats within the study area (Figure 2.3-1). As indicated in Table 2.3-1, this includes 22.2 acres of non-native grassland, 0.4 acre of non-native vegetation, 9.2 acres of disturbed habitat, and 2.2 acres of urban/developed habitat. Non-native vegetation, disturbed habitat, and urban/developed habitat are not considered sensitive. Therefore, impacts to these habitats are considered less than significant. Non-native grassland is considered a Tier III habitat by the County, which is considered sensitive. **Impacts to non-native grasslands are considered significant, direct impacts** (**Impact BI-1**). No direct impacts to federally protected wetlands or riparian habitat would occur as none exist within the project impact area.

Indirect Impacts to Biological Resources (Guidelines 3, 4, and 5)

The proposed project could indirectly impact sensitive habitats on the properties to the north, east, and south. Potential indirect impacts to surrounding properties consist of lighting, noise, increased human/domesticated animal intrusion, and introduction of invasive, non-native species. Indirect operational lighting and noise impacts are not anticipated to be significant as the plant communities are not adversely impacted by these factors. Also, the proposed project lighting would comply with the EOMSP and County Dark Sky Ordinance to reduce light spillage. The proposed project is not anticipated to significantly increase human/domesticated animal intrusion because the site is separated from sensitive habitats by roadways to the east, west and south, and a future retaining wall along the northern boundary. Plant composition is also potentially subject to intrusion of invasive, non-native species. However, as the grasslands are already composed of non-native species and potential sources of invasive species already exist in the area, the project would not have a significant indirect impact on the non-native grassland habitat**.**

The proposed project would not involve the use of groundwater. While the project would increase the impervious area and reduce water absorption into the groundwater table, since runoff would be directed into the storm drain system, impacts to the water table are not expected to exceed three feet, and no wetlands exist in the area that would be impacted by a slight decrease in the water table.

The proposed project is not located in the vicinity of wetlands and, therefore, no wetland buffer is required.

Overall, indirect sensitive habitat impacts would be considered less than significant.

2.3.2.2 *Sensitive Species*

Guidelines for the Determination of Significance

The following guidelines used to determine significance are based on the County of San Diego Guidelines for Determining Significance and Report and Content Requirements- Biological Resources (second revision July 30, 2008).

The proposed project would result in significant, direct impacts related to sensitive species if it would:

1. Impact one or more individuals of a species listed as federally or state endangered or threatened.
2. Impact the regional long-term survival of a County Group A or B plant, County Group 1 animal, or a California Species of Special Concern.
3. Impact the regional long-term survival of a County Group C or D plant species or a County Group 2 animal species.
4. Impact arroyo toad aestivation or breeding habitat.
5. Impact golden eagle habitat.
6. Result in a loss of functional foraging habitat for raptors.
7. Increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.

8. Impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
9. Increase human access or predation or competition from domestic animals, pests, or exotic species to levels that would adversely affect sensitive species.
10. Impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire-fuel modification, and/or noise-generating activities such as construction.

Analysis

Direct Impacts to Sensitive Species

Species Listed as Federally or State Endangered or Threatened (Guideline 1)

No federal or state listed species were observed or detected within the study area. Therefore, none are anticipated to be affected upon implementation of the proposed project. **Thus, a less than significant impact would occur to federal- or state-listed endangered species.**

County Group A or B Plant, County Group 1 Animal, or a California Species of Special Concern (Guideline 2)

The proposed project would impact the entire study area, including all plants and animals within this area. As detailed under existing conditions, no sensitive plant species were found or expected to occur within the study area. No County Group A or B plant or State (plant) Species of Special Concern would be impacted by the project, as none were observed within the study area. Six County Group 1 and/or State (animal) Species of Special Concern (grasshopper sparrow, turkey vulture, northern harrier, white-tailed kite, prairie falcon, and loggerhead shrike) were observed/detected within the study area. Although impacts to potential habitat (non-native grassland) for these species would occur, this impact would not affect the regional long-term survival of these six animal species. **Thus, a less than significant impact would occur to County Group A or B Plant, County Group 1 Animal, or a California Species of Concern.**

County Group C or D Plant Species or a County Group 2 Animal Species (Guideline 3)

No County Group C or D plant would be impacted by the proposed project, as none were observed within the study area. Two County Group 2 animal species (California horned lark and barn owl) were observed/detected within the study area. Although impacts to potential habitat (non-native grassland) for these species would occur, this impact would not affect the regional long-term survival of these two animal species. **Thus, a less than significant impact would occur to County Group C or D Plant species or a County Group 2 Animal species.**

Arroyo Toad (Guideline 4)

The study area does not support arroyo toad aestivation or breeding habitat. **Thus, a less than significant impact would occur to the arroyo toad.**

Golden Eagle (Guideline 5)

No golden eagles were observed or detected within the study area during surveys. The closest recorded golden eagle location is approximately 11 miles east of the study area in San Ysidro Mountains. **Thus, a less than significant impact would occur to golden eagles.**

Raptor Foraging (Guideline 6)

Raptor species regularly use non-native grassland habitats for foraging. White-tailed kite, northern harrier, and other raptor species were observed within the study area and/or flying overhead. Implementation of the proposed project would result in a loss of 22.2 acres of functional foraging habitat (non-native grassland) for raptors. **The impact to raptors is considered a significant, direct impact (Impact BI-2).**

Core Wildlife Area (Guideline 8)

The study area is not part of a BRCA. **Thus, no impact would occur to a BCRA.**

Sensitive Species Nesting (Guideline 10)

Noise from such sources as clearing and grading could disturb sensitive birds found on the project site during construction. Noise-related impacts would be considered significant if sensitive species (such as raptors) are displaced from nests which have been established on the property prior to construction. **If tree-nesting raptors are present within 500 feet of the impact area or if ground-nesting raptors are present within 800 feet of the impact area, the impact of the project would be considered a significant, indirect impact (Impact BI-3).**

Indirect Impacts to Sensitive Biological Resources (Guidelines 7, 9, and 10)

Indirect impacts on sensitive species could potentially be associated with light, human/domesticated animal intrusion, introduction of invasive species, and noise. No sensitive plant species are located on or adjacent to the subject property. Sensitive animal species within the study area consist of loggerhead shrike (on site), grasshopper sparrow (on site), California horned lark (on site), and raptors (off site). For the specific location of these species, refer to Figure 2.3-1.

It is noted that a small patch of disturbed Diegan coastal sage scrub occurs approximately 450 feet to the northeast of the site outside of the study area. However, given the highly disturbed nature of the sage scrub, the likelihood of coastal California gnatcatchers nesting in this area is minimal. In addition, a ridge top occurs a minimum of 50 feet south of the disturbed Diegan coastal sage scrub obscuring the line of sight from the project site. Therefore, no indirect impacts to sensitive species within this habitat are anticipated.

Construction

Lighting impacts from construction would not cause a significant impact because night-time lighting is not anticipated.

Construction personnel shall be limited to the study area and are not expected to bring domestic animals to the site. Therefore, human/domesticated animal intrusion indirect impacts during construction are not anticipated.

The proposed project would follow the EOMSP Subarea I landscaping guidelines, and would not include invasive species within 300 feet of conservation/limited use area, the OVRP, Johnson Canyon, O'Neal Canyon, or where invasive could overtake natural vegetation. Also, the proposed project lighting would comply with the EOMSP and County Dark Sky Ordinance to reduce light spillage onto adjacent properties. **Thus, indirect construction impacts on sensitive species would be less than significant.**

Operation

Operation of the proposed project would generate light and noise but would not increase the potential for human/domesticated animal intrusion or introduction of invasive species. Night-time lighting would take place within the parking lots and for building security. However, indirect light impacts are not anticipated as all lighting would include directional shields and would not overflow from the service area into adjoining parcels (refer to Section 1.2.2, Technical, Economic, and Environmental Characteristics). Additionally, no sensitive species are anticipated adjacent to the proposed project. Noise impacts are not anticipated to be significant as the area is already subjected to noise from surrounding roadways and SR-125 and due to the absence of sensitive species adjacent to the property. The proposed project is not anticipated to significantly increase human/domesticated animal intrusion because the site would not provide direct access to any habitat sensitive to intrusion. The non-native grassland onsite and in the vicinity is already subject to human intrusion, as evidenced by the various trails through the site. Invasive species would be excluded from the proposed landscaping which would avoid impacts to surrounding biological resources. **Thus, indirect sensitive species impacts from operation of the proposed project would be considered less than significant.**

2.3.2.3 *Wildlife Movement*

Guidelines for the Determination of Significance

The following guidelines used to determine significance are based on the County of San Diego Guidelines for Determining Significance and Report and Content Requirements- Biological Resources (second revision July 30, 2008).

The proposed project would result in significant direct impacts related to wildlife movement if it would:

1. Prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
2. Substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
3. Create artificial wildlife corridors that do not follow natural movement patterns.
4. Increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
5. Result in an inadequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
6. Would not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.

Analysis

Wildlife Corridors (Guidelines 1, 2, 3, 4 and 5)

As detailed in Section 2.3.1, Existing Conditions, under the heading *Habitat Connectivity and Wildlife Corridors*, the study area does not function as a local or regional wildlife corridor or linkage. No nursery sites occur within the study area and it is not located within a BRCA. The project would develop the entire site and would not create an artificial wildlife corridor. No corridors exist within the study area vicinity and, therefore, no indirect impacts related to noise, nighttime lighting or incompatible uses adjacent to a wildlife corridor would occur. Access to remaining undeveloped areas to the north and east that contain raptor foraging habitat and potential breeding habitat (i.e., essential habitat) would not be blocked by the project. **Thus, a less than significant impact would occur to wildlife corridors.**

2.3.2.4 *Regulatory Compliance*

Guidelines for the Determination of Significance

The following guidelines used to determine significance are based on the County of San Diego Guidelines for Determining Significance and Report and Content Requirements - Biological Resources (second revision July 30, 2008).

The proposed project would result in significant direct impacts related to regulatory compliance if it would:

1. Impact Diegan coastal sage scrub vegetation outside the MSCP in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
2. Preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or Resource Agencies as critical to future habitat preserves.

3. Impact any amount of sensitive habitat lands as outlined in the RPO.
4. Not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
5. Not conform to goals and requirements outlined in any applicable Habitat Conservation Plan (HCP), Resource Management Plan (RMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
6. Not minimize impacts to BRCA, as defined in the BMO.
7. Preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
8. Not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
9. Not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
10. Reduce the likelihood of survival and recovery of listed species in the wild.
11. Result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
12. Result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act [BGEPA]).

Analysis

Diegan Coastal Sage Scrub (Guidelines 1, 4, and 7)

The project is within the south County segment of the MSCP Subarea Plan but does not support Diegan coastal sage scrub habitat. The project would not preclude connectivity of California coastal sage scrub habitat, as the project site does not provide a connection between such habitat. **Thus, the project would not indirectly impact any Diegan coastal sage scrub.**

NCCP (Guideline 2)

Implementation of the proposed project would not preclude or prevent the preparation of the subregional NCCP, as the study area occurs within an approved MSCP. The study area would not impact land within the County's Proposed Hardline Preserve identified in the County's MSCP Subarea Plan. **Thus, the project would not impact the goals of the NCCP.**

RPO-Sensitive Habitat (Guideline 3)

The study area does not support any habitats listed as sensitive under the RPO. **Thus, no impact to RPO-sensitive habitat would occur.**

Regulatory Compliance (Guideline 5)

The project is within a Minor Amendment Area of the County's MSCP Subarea Plan and would conform to the goals and requirements of this regional planning effort through the minor amendment process. No other regional planning effort (such the Otay River SAMP or Otay River Water Management Plan) includes the study area. **Thus, the project would have a less than significant impact with respect to regulatory compliance thresholds.**

BRCA and Wildlife Corridors (Guidelines 6, 7, and 8)

The study area does not function as a local or regional wildlife corridor or linkage. No nursery sites occur within the study area and the study area is not located within a BRCA. **Thus, no impacts to the BRCA or wildlife corridor would occur.**

Narrow Endemic Species (Guideline 9)

No MSCP narrow endemic species were observed within the study area during biological surveys. As such, none would be impacted upon project implementation. **Thus, no impacts to narrow endemic species would occur.**

Listed Species (Guideline 10)

No listed plant or animal species were observed or detected within or adjacent to the study area during biological surveys. **Thus, no impacts to listed species would occur.**

MBTA (Guideline 11)

As mentioned above, there is potential for nesting raptors or migratory birds to occur onsite or in the vicinity. **Thus, the proposed project could result in a significant impact relative to the MBTA (Impact BI-4).**

Eagles (Guideline 12)

No eagles were observed or detected within the study area, and no eagle nests occur within 11 miles of the study area. **Thus, no impacts to eagles would occur.**

2.3.3 Cumulative Impact Analysis

Guidelines for the Determination of Significance

The following guidelines used to determine significance are based on the County of San Diego Guidelines for Determining Significance and Report and Content Requirements- Biological Resources (second revision July 30, 2008).

The proposed project would result in significant cumulative impacts on biological resources if it would:

1. Result in impacts that are individually limited, but cumulatively considerable which would have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

Analysis

Cumulative Effect on Biological Resources (Guideline 1)

The cumulative impact analysis for the proposed project includes a study area, defined by land use and political boundaries, species ranges, vegetation communities, site conditions, and topography. For this project, the cumulative impact study area is defined by those portions of Otay Mesa within the County (i.e., EOMSP area), an area extending from the lower hills of Otay Mountain in the east, the Otay River Valley in the north, the City/County boundary in the west, and the U.S.-Mexico International Border in the south.

As illustrated in Table 2.3-2, *Cumulative Projects*, a total of 67 cumulative projects have been identified and reviewed for this cumulative analysis. The focus of the evaluation was on non-native grassland, as this is the only sensitive habitat that would be impacted by the project. By focusing on non-native grassland, the cumulative impact on the raptors which utilize this habitat type is also accounted for.

As illustrated in Table 2.3-2, the cumulative projects collectively would impact a total of 1,260.29 acres of non-native grasslands. In addition, these projects would also permanently preserve 894.89 acres of non-native grassland or like-functioning habitat. As this represents an overall mitigation ratio of 0.7:1, the goal of 0.5:1 for non-native grasslands has been met to date. **If the proposed project does not offset its impact on non-native grassland, the project would have a significant cumulative impact on non-native grassland habitat (Impact BI-5).**

2.3.4 Significance of Impacts Prior to Mitigation

Based on the analysis provided above, the proposed project would have the following significant impacts prior to mitigation.

Impact BI-1: Direct loss of 22.2 acres of non-native grassland.

Impact BI-2: Direct loss of raptor foraging habitat.

Impact BI-3: Potential indirect noise impacts to raptor nests during construction.

Impact BI-4: Impact to birds protected by the MBTA.

Impact BI-5: Cumulative impact from the project's contribution of the loss of 22.2 acres of non-native grassland within the cumulative study area.

2.3.5 Mitigation

Acquisition and long-term preservation of a proposed 15.4-acre mitigation site pursuant to the following mitigation measure would reduce **Impacts BI-1, BI-2, and BI-5** to less than significant. The proposed mitigation location is shown on Figure 2.3-2, *Off-site Mitigation Parcel*, and the proposed artificial burrows are shown on Figure 2.3-3, *Enhancement Plan*.

M-BI-1: The Project Applicant shall acquire and preserve a 15.4-acre parcel, known as the Attisha Trust parcel (Figure 2.3-2). A conservation easement shall be placed over the land and a one-time endowment shall be provided by the Project Applicant to be used for perpetual management of the Attisha Trust parcel. In addition, although no impacts to burrowing owl are anticipated, the Project Applicant proposes installation of five artificial burrows on the Attisha Trust parcel to improve the habitat value for this species. Enhancement of the mitigation parcel for burrowing owl use will be performed pursuant to the Enhancement Plan contained in Appendix E.2 of the SEIR. Each burrow will contain two nesting chambers with separate entrances. The County Department of Parks and Recreation has agreed to accept the Attisha Trust parcel in fee title along with the endowment to manage the parcel in perpetuity following installation of fencing (six-foot vinyl chain link fence) and burrows.

Implementation of the following mitigation measure would reduce potential indirect noise impacts to raptor nesting (**Impacts BI-3**) to less than significant.

M-BI-2: No grading or clearing shall occur within 500 feet of tree-nesting raptor habitat during the tree-nesting raptor breeding season (January 15 through July 15 or until all nesting is complete) or within 800 feet of ground-nesting raptor habitat during the ground-nesting raptor breeding season (February 1 through July 15 or until all nesting is complete). If clearing or grading is planned to begin during the raptor breeding season, the Director of Planning and Land Use may waive this condition, through written concurrence from the U.S. Fish and Wildlife Service and the California Department of Fish and Game, if no raptors or nesting/breeding birds are present in the vicinity of the brushing, clearing or grading. A pre-construction survey shall be conducted to determine if breeding or nesting raptors occur within impact areas. If there are no raptors nesting (includes nest building or other breeding/nesting behavior) within this area, clearing or grading shall be allowed to proceed. However, if any of these birds are observed nesting or displaying breeding/nesting behavior within the area, clearing or grading shall be postponed until all nesting (or breeding/nesting behavior) has ceased.

Implementation of the following mitigation measure would reduce potential impacts to migratory nesting birds protected by the MBTA (**Impacts BI-4**) to less than significant.

M-BI-3: No grading, clearing, or construction activities shall occur within 300 feet of vegetated habitat during the breeding season for migratory birds (February 1 through September 15). The Director of Planning and Land Use may waive this condition, through written concurrence from the U.S. Fish and Wildlife Service and the California Department of Fish and Game, if no raptors or nesting/breeding birds are present in the vicinity of the brushing, clearing or

grading. Surveys shall be conducted by a qualified biologist to determine the presence or absence of nesting migratory birds on the project site.

2.3.6 Conclusion

With preservation of an off-site mitigation parcel pursuant to Mitigation Measure **M-BI-1** and limitations on construction, pursuant to Mitigation Measures **M-BI-2** and **M-BI-3**, the project impacts on biological resources would be reduced to less than significant.

Impacts related to non-native grassland and raptor foraging habitat (**BI-1**, **BI-2**, and **BI-5**) would be mitigated by Mitigation Measure **M-BI-1**, which includes the purchase of habitat on the Attisha Trust parcel for the purpose of preservation, in perpetuity. The southern portion of the Attisha Trust parcel is a south-facing slope that supports Diegan coastal sage scrub and non-native grassland habitat while the northern portion of the mitigation site is a flat mesa with extant mima mound topography that supports Diegan coastal sage scrub, non-native grassland, vernal pool, and disturbed habitat (dirt roads). These habitats are known to serve as both nesting and foraging habitat for burrowing owls and foraging habitat for other raptors. The Attisha Trust parcel has been accepted by the resource agencies given its proximity to Dennery Canyon, the Otay Mesa preserve system, and adjacent vernal pool habitat.

The proposed project would be "up-tiering," and providing higher quality habitat as mitigation than that which would be impacted. The Attisha Trust parcel supports a greater diversity of plant species, would provide five artificial burrow sites with two nesting chambers with separate openings for burrowing owl, supports vernal pool habitat (with San Diego fairy shrimp) adjacent to existing vernal pools preserves, and supports Quino checkerspot butterfly habitat. Therefore, the functions and values of the mitigation site are much higher than that of the proposed project site.

Indirect noise impacts to raptor and migratory bird nesting (Impacts BI-3 and BI-4) would be mitigated by Mitigation Measures M-BI-2 and M-BI-3, which would restrict clearing and grading activities to avoid impacts to raptor and migratory bird nesting and breeding.

Table 2.3-1
EXISTING VEGETATION AND VEGETATION IMPACTED

Vegetation Type	MSCP Tier Habitat Type	Existing (acres)	Impacted (acres)	Preserved (acres)
Non-native Grassland	Tier III	22.2	22.2	0
Non-native Vegetation	NA	0.4	0.4	0
Disturbed Habitat	Tier IV	9.2	9.2	0
Urban/Developed	NA	2.2	2.2	0
	Totals	**34.0**	**34.0**	**0**

Source: Helix 20010a
NA=Not Applicable

Table 2.3-2
CUMULATIVE PROJECTS

Map Reference	Project Name	Project Number	Non-Native Grassland (acres)	
			Impacts	Mitigation (non-native grassland or better)
County Projects				
1	Otay Tech Center (formerly Sunroad Centrum Tech Center)	TM 5538, ER 07-19-007, SPA 07-003 (Previously TM 5139, MUP 98-020, STP 02-05139-1)	186.5	93.3
2	Saeed TM/Airway Business Center	TM 5304	38.5	19.3
3	Dillard and Judd Roll County LLC/ Enrico Fermi Industrial Park	TM 5394	NA	NA
4	Otay Hills Construction Aggregate Extraction Operation	MUP04-004, RP04-001, ER04-19-004	41.8	30.9
5	Otay Mesa Travel Plaza	TPM 20414, MUP 98-024, MUP Modification, 98-024-01	73.5	39.5
6	Burke Minor Subdivision/Otay Logistics Center	TPM 20701RPL1, ZAP 99-029, STP 05-018	40.0	20.0
7	Pilot Travel Center	TPM 20894, STP 05-021	12.9	6.5
8	East Otay Mesa Auto Storage/ Aaron Construction Auto Auction Park	MUP 00-012, Minor Deviation 00-012-02	33.4	16.7
9	Otay Mesa Auto Transfer/Rowland	MUP 03-001	8.0	4.0
10	Road/One COPART Salvage Auto Auctions	MUP 88-020, STP 00-070	NA	NA
11	Salvage Yards Major Use Permit Modification	MUP 98-001 RPL1	NA	NA

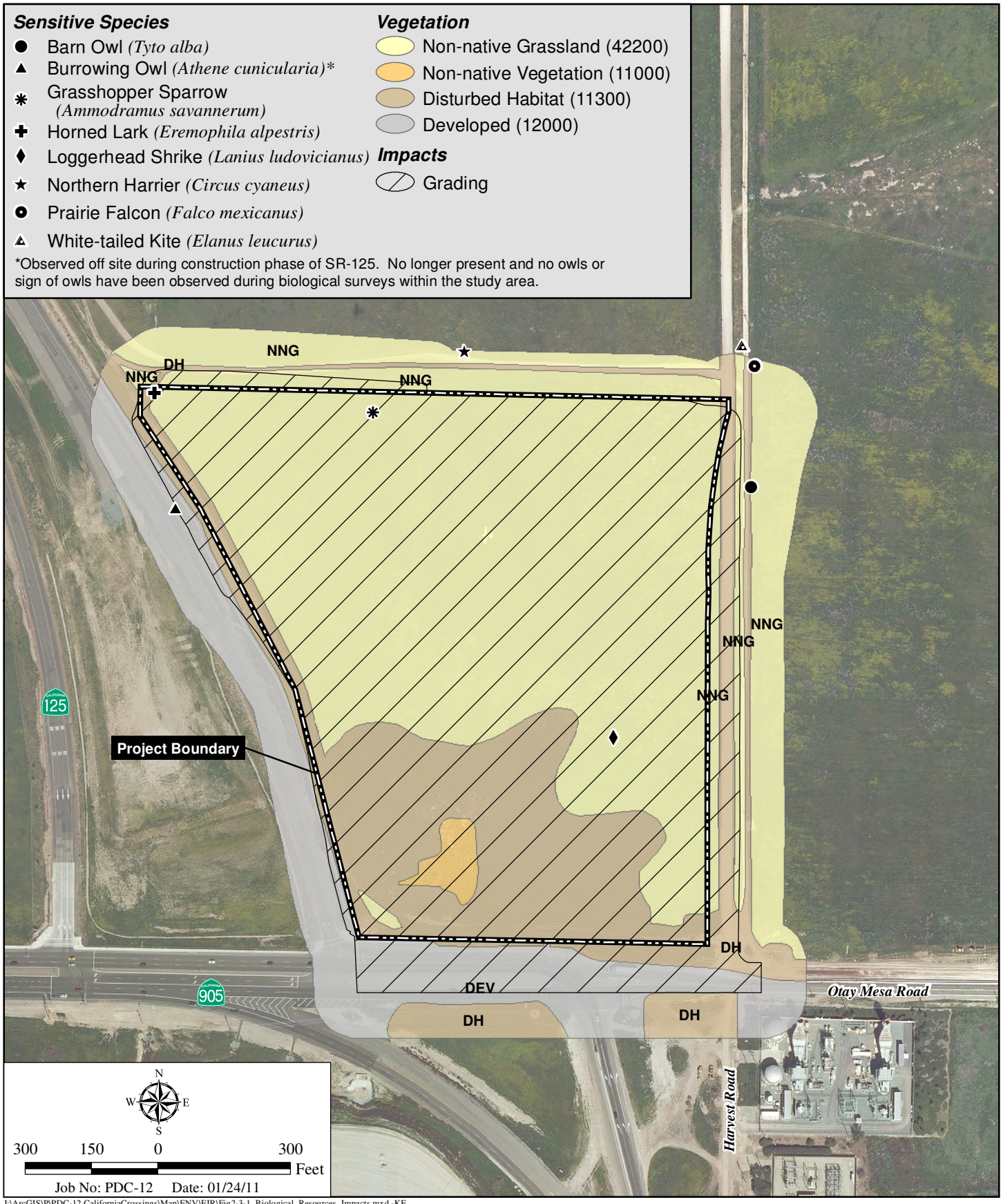
Table 2.3-2 (cont.)
CUMULATIVE PROJECTS

Map Reference	Project Name	Project Number	Non-Native Grassland (acres)	
			Impacts	Mitigation (non-native grassland or better)
County Projects (cont.)				
12	Otay Mesa Generating Project (Calpine)	TPM 20570	45.2	31.8
13	Otay Business Park (Paragon)	TM 5505	176.1	176.1
14	Paseo De La Fuente	CG 4530	11.96	5.98
15	Border Patrol Site Grading Plan (East Otay Mesa Parcel B Grading Plan)	L 14456	17.7	8.86
16	Power Plant Laydown Site	L 14208	13.5	6.75
17	Vulcan Batching Plant	L 14625	10.9	5.45
18	Corrections Corporation of America	SPA06-005, MUP06-074	37.0	25.2
19	Maple Leaf Industrial/Piper Otay Park	TM 5527	23.4	11.7
20	Otay Crossings Commerce Park	TM 5405, SPA 04-006, MUP 00-024	290.4	273.2
21	California Crossings (proposed project)	TPM 21046, MUP06-102, 93-19-006AA	23.4	12.75
22	International Industrial Park	TM 5549	NA	NA
23	RTX (Rapid Transfer Express)	S08-022	14.63	15.0
24	OMC Properties	TPM 21140	NA	NA
Otay Water District Capital Improvement Projects				
25	Pressure-reducing station	NA	NA	NA
26	#860-1 4 MG Reservoir	NA	NA	NA
27	Alta Road Pipe Placement	NA	NA	NA
82	Roll Reservoir Pipeline	NA	NA	NA
Caltrans				
29	SR-905	NA	NA	NA
30	SR-125	NA	NA	NA
Caltrans and GSA				
31	SR-11 and Otay Mesa East Port of Entry	PM 0.0/2.7, EA056300	NA	NA
GSA/CBP Capital Improvement Projects				
32	U.S. Cargo Import Facility	NA	NA	NA
33	Reconfiguration and Expansion of the Existing San Ysidro POE	NA	NA	NA
City of San Diego, County of San Diego and City of Chula Vista				
34	Otay Valley Regional Park	NA	NA	NA
City of San Diego				
35	Sunroad/Interstate Industrial Center	TPM 98-0759	NA	NA
36	Sunroad Otay Park	TM 91-0394	NA	NA
37	Street/La Media Truck Park III	77518	NA	NA
38	Lone Star/New Millennium	50728	112.7	56.4
39	Semitrailer Storage Facility	Planned DP 12083	NA	NA
40	Airway 18 Truck Terminal/ Airway Auto Park Storage	2246	NA	NA

Table 2.3-2 (cont.)
CUMULATIVE PROJECTS

Map Reference	Project Name	Project Number	Non-Native Grassland (acres)	
			Impacts	Mitigation (non-native grassland or better)
City of San Diego (cont.)				
41	California Terraces Planning Areas 13 & 14 Phase I	4987	NA	NA
42	Dennery Ranch Village 2/3	5091	NA	NA
43	Dennery Ranch: Las Casitas	NA	NA	NA
44	Dennery Ranch: Nakano	NA	NA	NA
45	Rivera del Sol: Neighborhood Park	NA	NA	NA
46	Hidden Trails: Neighborhood Park	6738	NA	NA
47	Ocean View Hills: Planning Area 6	TM 86-1032	NA	NA
48	St. Jerome's Catholic Church	NA	NA	NA
49	Southview	2204	NA	NA
50	Candlelight Villas	50591/40329	NA	NA
51	Handler Otay Mesa Phase 1	92122	31.8	15.9
52	Otay Corporate Center South	98825	NA	NA
53	Las Californias Center	4281	NA	NA
54	Just Rite	5751	NA	NA
55	World Petrol III	32284/97452	NA	NA
56	Pardee Commercial	NA	NA	NA
57	Martinez Ranch Business Park	100994/45445	NA	NA
58	Siempre Viva Business Park	102899	NA	NA
59	Southwestern Community College	95483	NA	NA
60	Brown Field Tech Park	88422/88430NA	NA	NA
61	Ingalls Property	NA	NA	NA
62	Esplande	NA	NA	NA
63	Interstate Industrial Center	NA	NA	NA
64	OMCP update	30330	NA	NA
65	Britannia 40	147108	39.2	19.6
66	Otay Mesa 17	125423	0.0	0.0
California Prison Health Care Receivership Corporation (CPR)				
67	California Health Care Facility, San Diego	SCH 2008061086	NA	NA
		TOTAL	1,260.29	894.89

Source: HELIX 2010a
NA=Not Available/Not Applicable, MUP=Major Use Permit, SPA=Specific Plan Amendment, DP=Development Permit, TM=Tentative Map, TPM=Tentative Parcel Map, PM=Parcel Map, EA=Environmental Assessment



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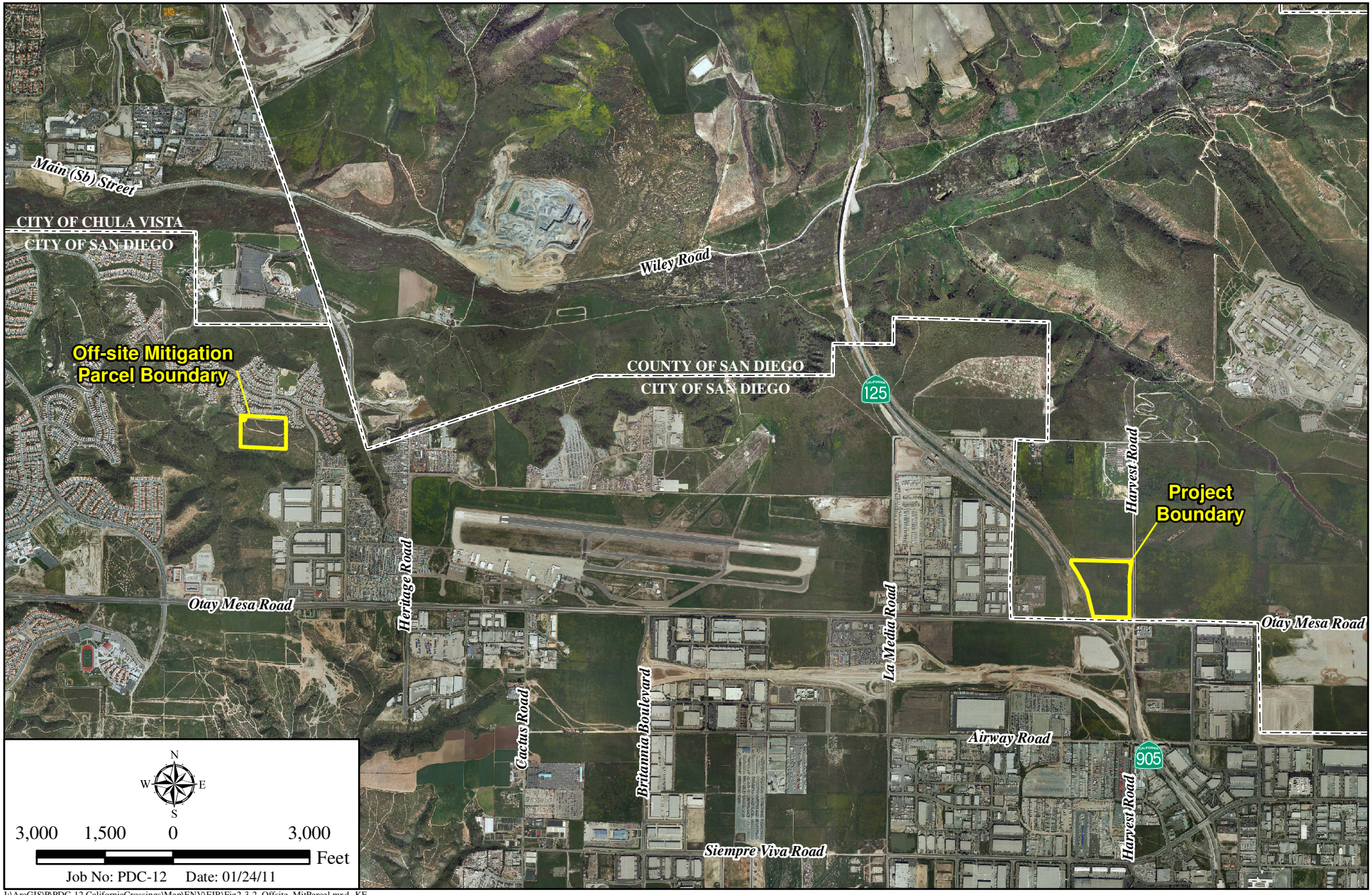
Vegetation, Sensitive Resources, and Impacts

CALIFORNIA CROSSINGS

HELIX Environmental Planning

Figure 2.3-1



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Off-site Mitigation Parcel

CALIFORNIA CROSSINGS

HELIX Environmental Planning

Figure 2.3-2

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Enhancement Plan

CALIFORNIA CROSSINGS

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Figure 2.3-3