

RPO wetlands are defined as lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained, hydric soil; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil, and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

According to the RPO, the following are not considered RPO wetlands:

- Lands which have attribute(s) specified above, solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of PDS determines that they:
 - Have negligible biological function or value as wetlands;
 - Are small and geographically isolated from other wetland systems;
 - Are not vernal pools; and
 - Do not have substantial or locally important populations of wetland dependent sensitive species.
- Lands that have been degraded by past legal land disturbance activities to the point that they meet the following criteria as determined by the Director of PDS:
 - Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
 - Do not have substantial or locally important populations of wetland dependent sensitive species.

The southern portion of the study area supports several unnamed ephemeral tributaries to Escondido Creek. These drainage features drain off site and flow through several rural residential properties before discharging into a reach of Escondido Creek located further to the west of the study area. The drainages represent erosion features cut within the steep topography and upland landscape that characterizes the southern portions of the study area.

The drainage features occur within upland habitat types and do not support a predominance of hydrophytes. Where vegetation occurs, it is composed of upland trees, shrubs, and herbaceous grasses and forbs found in the chaparral and other upland habitat types that encompass the drainage features. The features do not meet this criterion in the RPO wetlands definition.

The drainage features are ephemeral and convey short duration, low volume flows. As such, the underlying soils are not inundated or saturated for sustained periods of time. The soils are sandy loams and non-hydric, including the area characterized by oak woodland, as confirmed by the soil pit evaluated on January 13, 2016 (Appendix L). The substratum is not predominantly undrained hydric soil. The features do not meet this criterion in the RPO wetlands definition.

The features are ephemeral and not perennial. The substratum is composed of non-hydric, sandy loam soil. The substratum is not predominately non-soil. The features drain off-site into rural residential properties before discharging into Escondido Creek further to the west. They do not contribute substantially to the biological functions or values of wetlands in the drainage system. As such, the drainages do not meet this criterion in the RPO wetlands definition.

1.4.12 Habitat Connectivity and Wildlife Corridors

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance.

Important corridors and linkages have been identified on a local and regional scale throughout the Multiple Habitat Conservation Program (MHCP) in northwestern San Diego County (covering the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista; AMEC Earth & Environmental et al. 2003) and the County MSCP (County 1998). The planning objectives of most corridors and linkages in western San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

The study area occurs within lands identified as PAMA under the Draft MSCP North County Plan (Figure 4). It also occurs in the general vicinity of lands identified as Core Area, outside of Linkage Area, in the Plan. PAMA in the region is based on the core and linkage concept of landscape-level conservation. The configuration of preserve lands includes large, contiguous areas of habitat supporting important species populations or habitat areas and important functional linkages and movement corridors between them. Appendix G identifies the Draft MSCP North County Plan conservation goals for the Harmony Grove Core Area and summarizes how the project is consistent with those goals (County 2009).

With respect to wildlife movement in the region, conservation targets generally include conserving a contiguous riparian corridor in Escondido Creek, and conserving a large core area of upland habitat around Del Dios Highlands Preserve and Elfin Forest Recreational Reserve. Related to these are conserving access from core upland areas to the Escondido Creek corridor and conserving regional east-west gnatcatcher movement. These conservation targets are discussed in further detail below.

Escondido Creek

In the vicinity of the study area, Escondido Creek likely functions to facilitate amphibian, bird, and large mammal movement in the local area. The Creek provides habitat for both common and sensitive species. As evidenced by 2014 surveys, sensitive species such as least Bell's vireo, yellow warbler, green heron, and others use the Creek for various life cycle needs. Birds move unobstructed through the local area. Although no evidence of use was observed on the site during surveys, southern mule deer (*Odocoileus hemionus fuliginata*) and coyote (*Canis latrans*) likely move through the local area to and from surrounding undeveloped or open space lands. The Creek provides shelter and resources for breeding and rearing young, a year-round water source and prey items for foraging, and a linear corridor of habitat for dispersal and migration.

Mule deer are generally crepuscular, but in the immediate vicinity of the project site, are likely to be more active at night due to human activity in the area. Because of their needs for forage and cover, mule deer have been reported to prefer edges over open or closed habitats; edge habitat is generally considered important to deer because of high habitat diversity within ecotones and easy access to more than one habitat type (Kremsater and Bunnell 1992). Mature chaparral stands provide essential cover and forage for mule deer during parts of the year (Wallmo et al. 1981). Mule deer summer foraging sites in California chaparral include riparian areas, seeps, springs, streams, and ponds. In fall, foraging sites include stream bottoms, ridge tops, and northern slopes. In winter, mule deer forage on south slopes and sheltered ridges (Ashcraft 1979). Therefore, with respect to the project site and immediate vicinity, mule deer would be most likely to travel, forage and seek cover at the chaparral-grassland edge, along existing trails, within the chaparral, and within the riparian habitat of Escondido Creek.

Coyote are active day and night, but are generally crepuscular, with peaks in activity at sunrise or sunset. In California, it has been reported that coyotes used habitat edges or ecotones, fuel breaks, existing roads and trails, and open chaparral more than dense, unbroken cover. In southern California where chaparral is adjacent to dense blocks of habitat, coyotes forage at night alone edges and return during the day to chaparral cover. The steep slopes and heavy cover of most chaparral communities impede coyote movements (Quinn 1990). Therefore, with respect to the project site and immediate vicinity, coyote would be most likely to travel, forage and seek cover at the chaparral-grassland edge, along existing trails, and within more-open stages of chaparral.

Within the study area itself, Escondido Creek is disturbed as a result of previous land uses, active construction for Harmony Grove Village, and the existing low-water crossing for Country Club Drive. The Creek has also experienced direct and indirect disturbances from previous agricultural uses when the old dairy farm at Harmony Grove Village was in operation, and it is currently impacted by active construction activities for the Harmony Grove Village development. Country Club Drive currently crosses the Creek perpendicularly as a two-lane road built on rip rap, culverts, and concrete over the low-flow channel. The crossing is depended upon by the residents that live to the east and west of the study area. The existing crossing represents a break in the riparian canopy and physical impediment to wildlife movement through the area.

Wildlife movement functions downstream of the study area are high as the habitat improves in overall quality and the topography steepens, although several residential properties occur that

might present barriers and disturbances to wildlife movement. Upstream of the study area, approaching the City of Escondido, the Creek diminishes in quality and function. A few thousand feet upstream of the study area, the Creek becomes heavily infested with non-native vegetation (e.g., Eucalyptus trees), and beyond that farther upstream, the soft-bottomed channel terminates where Enterprise Street crosses the Creek. East of the Enterprise Street crossing, Escondido Creek flows in a concrete-lined channel through urban/developed portions of the City of Escondido from just east of Valley Center Road.

In summary, wildlife movement functions in Escondido Creek are probably highest beginning immediately upstream (east) of the study area and extending downstream (west) to Elfin Forest, with a significant barrier to movement existing within the study area at the existing low-water crossing for Country Club Drive.

Del Dios Highlands Preserve - Elfin Forest Recreational Reserve

Abutting the southern boundary of the study area is the County's Del Dios Highlands Preserve. The Preserve connects to the Elfin Forest Recreational Reserve and the San Dieguito River Park Joint Powers Authority's Coast-to-Crest Trail, which stretches from Del Mar to Julian. These areas support habitat connections and functional travel routes and wildlife corridors between the MHCP areas to the north and the Lake Hodges Segment of the South County MSCP Subarea (County 1997) to the south. Most importantly, these areas serve to facilitate regional gnatcatcher and large mammal movement south of the study area, to and from core habitat around Lake Hodges to the east, and Elfin Forest-San Elijo Hills-Rancho La Costa areas to the west.

Intact stands of scrub and chaparral habitat in the southern portions of the study area directly connect with off-site habitat in the Del Dios Highlands Preserve to the south. In essence, the on-site habitat serves as a northern extension of the larger core habitat associated with the Del Dios Highlands Preserve and Elfin Forest Recreational Reserve. This northern extension abruptly terminates on site, in the southern-central portion of the study area, where the scrub and chaparral transition into non-native grassland. The non-native grassland represents the northern terminus of the core habitat and does not significantly contribute to movement functions for large mammals in the area, including mule deer and coyote, because these species are primarily crepuscular and prefer habitat edges, existing trails, and other habitat types for movement. The grassland on the site provides no cover and relatively few resources. As such, no direct, north-south connection of core area habitat exists through the site between the Del Dios Highlands Preserve and Escondido Creek because the areas are separated by non-native grassland. The core habitat extends into the southern portion of the site and bends around the site to the east to connect with Escondido Creek, as explained below.

A constrained, north-south connection of core habitat between Del Dios Highlands Preserve and Escondido Creek exists around the site to the east and along the eastern boundary. One of the Escondido Creek Open Space properties, owned by the Escondido Creek Conservancy, abuts the study area to the north, northeast, and east. Additional undeveloped lands, rural/estate properties, and lands constrained by steep slopes and rugged terrain occur to the immediate east and southeast of the study area. The Escondido Creek Conservancy and Conservation Biology Institute identify the general area as "important for conservation" (ECC and CBI undated) to

connect undeveloped lands. Scrub and chaparral in these areas provide a constrained connection of habitat between Del Dios Highlands Preserve and Escondido Creek. The connection is more constrained within the study area and along the eastern boundary due to existing residential uses, patchiness of scrub and chaparral habitat, and presence of non-native grassland. Rural residential uses about the eastern boundary of the study area that present an existing constraint to the connection, although developments are limited to several narrow roadways and residential homes amongst the scrub and chaparral. The Draft MSCP North County Plan California Gnatcatcher Habitat Evaluation Model shows the habitat within the study area and along the eastern boundary ranked as having no value to the gnatcatcher for nesting (County 2008b). This is consistent with the patchiness of habitat inventoried during 2014 surveys, despite the gnatcatcher pair confirmed along the eastern boundary. The scrub also supports a prevalence of chaparral constituents due to its adjacency with chaparral that has been established in the area for some time.

While the project site itself does not function as a corridor, the eastern edge of the site likely contributes to north-south wildlife movement that occurs through the general area referred to as West Ridge, which would connect known coastal California gnatcatcher occurrences north of Escondido Creek to other known occurrences south and southeast of the site within the Del Dios Highlands Preserve. There is an area of high value gnatcatcher habitat about half a mile northeast of the site (County 2008b). The high value habitat area is an isolated island preserve designated as draft PAMA within Harmony Grove Village and Rincon del Diablo Water District open space (Figure 4). The project site is separated from this area by Harmony Grove Village developments and local roadways, although a constrained and fragmented connection of scrub and chaparral habitat exists along a linear path to the general northeast, east, and southwest of the site.

A general assessment of off-site lands situated along the constrained linkage was conducted based on surveys and review of aerial imagery. The Harmony Grove Village and Rincon del Diablo Water District island preserve represents the northern limit of the constrained linkage section that was assessed (Figure 4). The West Ridge area to the east of the site represents the approximate center of the linkage. Lands to the south within Del Dios Highlands Preserve and further to the southeast toward Lake Hodges represent the southern limit of the linkage section.

The northern limit at the Harmony Grove Village and Rincon del Diablo Water District island preserve supports coastal sage scrub and coastal sage-chaparral on moderate to steep slopes, with evidence of previous disturbance. This is the area of high value to gnatcatcher based on the County Habitat Evaluation Model, although portions of the habitat appear to be disturbed and no gnatcatcher records are reported at this location. The southern tip of this area is characterized by severe slopes from previous mining activities. Moving south from the Harmony Grove Village and Rincon del Diablo Water District island preserve, the connection of habitat is broken by existing developments. Low- and poor-flying birds, such as gnatcatcher, likely have two avenues of movement at this break point as they continue south toward Escondido Creek and the Escondido Creek Conservancy open space. They could continue directly south, along lands on the north and west side of Harmony Grove Road, or they could continue directly southeast, along lands on the south and east side of Harmony Grove Road.

The avenue of movement directly south of the Harmony Grove Village and Rincon del Diablo Water District island preserve eventually leads to another island preserve within Harmony Grove Village open space, but the path is interrupted by existing graded pads, road developments, and residential developments that range 400 feet to 1,000 feet in length along the movement path. Once at the second Harmony Grove Village island preserve, the habitat is composed of coastal sage scrub and coastal sage-chaparral on moderate to steep slopes. This area is not identified as high value gnatcatcher habitat on the Habitat Evaluation Model, although gnatcatcher records are reported at this location. Moving south toward the Escondido Creek Conservancy open space, gnatcatchers cross Harmony Grove Road, which averages approximately 30 feet in length, before entering the Escondido Creek riparian corridor and undeveloped scrub and chaparral within the Escondido Creek Conservancy open space. These areas are not identified as high value habitat and no gnatcatcher records are reported at these locations.

The movement avenue directly southeast of the Harmony Grove Village and Rincon del Diablo Water District island preserve crosses Harmony Grove Road and eventually leads to the Escondido Creek riparian corridor, with access to larger blocks of undeveloped scrub and chaparral on the south and east sides of the Creek. These areas are also not identified as high value gnatcatcher habitat and no gnatcatcher records are reported at these locations. This path is interrupted by existing roadway and abandoned industrial developments approximately 30 feet to 400 feet in length. Once across these developments, gnatcatchers can continue south and east within Escondido Creek riparian habitat or the adjacent scrub and chaparral within the Escondido Creek Conservancy open space.

Once at the Escondido Creek Conservancy open space, birds would continue south and southeast toward the West Ridge. This north-south trending movement avenue is characterized by scrub and chaparral on moderate slopes, with portions constrained by several narrow driveways and rural residences. The undeveloped areas are characterized by broken and intact stands of coastal sage scrub, coastal sage-chaparral, and mixed chaparral on moderate slopes. None of the areas are identified as high value gnatcatcher habitat and no gnatcatcher records are reported. The total width of the avenue, including the existing undeveloped habitat, driveways, and rural residences, ranges from approximately 1,500 feet to 2,500 feet across the general area east of the site. The scrub and chaparral along the eastern boundary of the site is situated along the westernmost edge of this avenue. As discussed above, the on-site coastal sage scrub in this area is considered to be of “Intermediate Value” due to it being less fragmented than other on-site scrub and due to the presence of a confirmed gnatcatcher breeding territory. Additional coastal sage scrub, coastal sage-chaparral, and mixed chaparral occur off-site to the east toward the West Ridge and along the north-south constrained linkage avenue. Properties along this avenue are either conserved within the Escondido Creek Conservancy open space, built-out to zoning designations with existing rural residences, or characterized by rugged terrain and steeper slopes, which present a significant constraint to future developments.

Once in the vicinity of the project site and areas east near the West Ridge, birds would continue to the general south, southeast, and southwest within a large and contiguous habitat block that includes the Del Dios Highlands Preserve and Elfin Forest Recreational Reserve. This represents the southern terminus of the constrained linkage. Most of the habitat is mixed chaparral with

smaller pockets of coastal sage scrub and coastal sage-chaparral. None of the areas are identified as high value gnatcatcher habitat, although scattered gnatcatcher records are reported further south and southeast of the project site.

In summary, a direct, north-south connection of core habitat between Del Dios Highlands Preserve and Escondido Creek does not exist through the Project site due to the large area of non-native grassland, which serves as an exposed break in the scrub and chaparral. Areas along the eastern boundary of the site could facilitate north-south movement of large mammals to and from Escondido Creek, although the habitat is patchy and constrained by existing residential uses. Areas along further to the east of the site are less constrained, where a more direct connection of scrub and chaparral habitat occurs along West Ridge.

1.5 APPLICABLE REGULATIONS

Biological resources in the study area are subject to regulatory review by federal, State, and local agencies. Under CEQA, impacts associated with a proposed project or program are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the County) pursuant to CEQA Guidelines. Biological resources-related laws and regulations that apply include federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), CWA, CEQA, California Endangered Species Act (CESA), CFG Code, and County RPO.

With respect to the proposed Project, the USFWS will be responsible for reviewing issues related to the coastal California gnatcatcher and least Bell's vireo pursuant to the FESA, migratory birds pursuant to the MBTA, Habitat Loss Permit, and regional conservation planning in light of the Draft MSCP North County Plan. The USACE will be responsible for reviewing issues related to waters of the U.S. The RWQCB will be responsible for reviewing issues related to waters of the State pursuant to the CWA. The State Porter-Cologne Water Quality Control Act would not apply as there are no isolated waters of the State in the study area. The CDFW will be responsible for reviewing issues related to vegetated and unvegetated streambeds pursuant CFG Code, nesting birds and raptors pursuant to CFG Code, Habitat Loss Permit, and regional conservation planning in light of the Draft MSCP North County Plan.

The County is the lead agency for the CEQA environmental review process in accordance with State law and local ordinances. During CEQA review, the County will be responsible for reviewing project issues per the Guidelines for Determining Significance for Biological Resources (County 2010a) and the County RPO. The County will also be responsible for reviewing the proposed Project with respect to Habitat Loss Permit, conservation planning in light of the Draft MSCP North County Plan, and consistency with biological goals and policies of the Elfin Forest – Harmony Grove Community Plan.

1.5.1 Federal Government

Federal Endangered Species Act

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened

with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 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 designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, 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. There is no designated critical habitat in the study area. The nearest critical habitat is for the coastal California gnatcatcher, approximately 1.3 miles to the southwest.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species’ use of a site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. The term “incidental” applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species’ survival must be submitted for issuance of Section 10(a) permits.

Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Clean Water Act and Rivers and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. is overseen by the USACE under Section 404 of the CWA. Most development projects are

permitted using Individual Permit or Nationwide Permit instruments. CWA Section 404 permits require Water Quality Certification by the RWQCB pursuant to CWA Section 401.

1.5.2 State of California

California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

California Endangered Species Act

The CESA established that it is State policy to conserve, protect, restore, and enhance State endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may “take” plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For State-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met.

Native Plant Protection Act

Sections 1900–1913 of the CFG Code (Native Plant Protection Act; NPPA) direct the CDFW to carry out the State Legislature’s intent to “...preserve, protect and enhance endangered or rare native plants of this state.” The NPPA gives the California Fish and Game Commission the power to designate native plants as “endangered” or “rare” and protect endangered and rare plants from take.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Section 1600 of CFG Code requires a Streambed Alteration Agreement (SAA) for any activity that would alter the flow, change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require an SAA include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities.

Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section

3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning (NCCP) program is a cooperative effort to protect habitats and species. It began under the State's NCCP Act of 1991, legislation broader in its orientation and objectives than the CESA or FESA. These laws are designed to identify and protect individual species that have already declined significantly in number. The NCCP Act of 1991 and the associated Southern California Coastal Sage Scrub NCCP Process Guidelines (1993), Southern California Coastal Sage Scrub NCCP Conservation Guidelines (1993), and NCCP General Process Guidelines (1998) have been superseded by the NCCP Act of 2003.

The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

This voluntary program allows the State to enter into planning agreements with landowners, local governments, and other stakeholders to prepare plans that identify the most important areas for a threatened or endangered species, and the areas that may be less important. These NCCP plans may become the basis for a State permit to take threatened and endangered species in exchange for conserving their habitat. The CDFW and USFWS worked to combine the NCCP program with the federal HCP process to provide take permits for State and federal listed species. Under the NCCP, local governments, such as the County, can take the lead in developing these NCCP plans and become the recipients of State and federal take permits. The County does not yet have an NCCP plan adopted for North County; the MSCP North County Plan is still in draft form and has been since 2009 (County 2009).

1.5.3 County of San Diego

Habitat Loss Permit Ordinance

The Habitat Loss Permit (HLP) Ordinance was adopted in March of 1994 (County 1994) in response to both the listing of the coastal California gnatcatcher as a federal threatened species and the adoption of the NCCP Act by the State. Pursuant to the Special 4(d) Rule under the FESA, the County is authorized to issue "take permits" for the coastal California gnatcatcher (in the form of Habitat Loss Permits) in lieu of Section 7 or 10(a) permits typically required from the USFWS. Although issued by the County, the USFWS and CDFW must concur with the issuance of an HLP for it to become valid as take authorization under the FESA. The HLP Ordinance states that projects must obtain an HLP prior to the issuance of a grading permit,

clearing permit, or improvement plan if the project would directly or indirectly impact any of several coastal sage scrub habitat types. The HLP Ordinance requires an HLP if coastal sage scrub or related habitat will be impacted, regardless of whether it is currently occupied by the coastal California gnatcatcher. An HLP is not required for projects within the boundaries of the MSCP that have an adopted subarea plan since take authorization is conveyed to those projects through compliance with the MSCP. HLPs are also not required for projects that have separately obtained Section 7 or 10(a) permits for take of the coastal California gnatcatcher.

Approval of an HLP is based on findings made pursuant to the HLP Ordinance. Findings need to demonstrate that a project's loss of coastal sage scrub would not exceed the County's 5 percent interim allowable loss limit. It would also have to demonstrate that the habitat loss would not preclude connectivity between areas of high habitat values or preclude or prevent the preparation of a subregional NCCP plan. Additionally, the findings must show that the habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the Southern California Coastal Sage Scrub NCCP Process Guidelines, and that the habitat loss would not appreciably reduce the likelihood of survival and recovery of listed species in the wild. Finally, the habitat loss must be incidental to otherwise lawful activities. An HLP application must be filed with the County if the Draft MSCP North County Plan has not been adopted at the time of environmental review of the proposed Project since impacts to coastal sage scrub and the coastal California gnatcatcher would occur. An HLP requires concurrence from USFWS and CDFW.

Resource Protection Ordinance

The County regulates natural resources (among other resources) as sensitive biological resources via the RPO (County 2011), the regulations of which cover wetlands, wetland buffers, sensitive plant and animal species, sensitive vegetation communities/habitat types, and habitats containing sensitive animals or plants. RPO section 86.604(a) regulates wetlands and wetland buffers as follows:

- (a) Wetlands. The following permitted uses shall be allowed:
 - (1) Aquaculture, provided that it does not harm the natural ecosystem.
 - (2) Scientific research, educational or recreational uses, provided that they do not harm the natural ecosystem.
 - (3) Removal of diseased or invasive exotic plant species as identified and quantified in writing by a qualified biologist and approved in writing by the Director of Planning and Land Use, and removal of dead or detached plant material.
 - (4) Wetland creation and habitat restoration, revegetation and management projects where the primary goal is to restore or enhance biological values of the habitat, and the activities are carried out pursuant to a written management/enhancement plan approved by the Director of Planning and Land Use.

- (5) Crossings of wetlands for roads, driveways or trails/pathways dedicated and improved to the limitations and standards under the County Trails Program, that are necessary to access adjacent lands, when all of the following conditions are met:
 - (aa) There is no feasible alternative that avoids the wetland;
 - (bb) The crossings are limited to the minimum number feasible;
 - (cc) The crossings are located and designed in such a way as to cause the least impact to environmental resources, minimize impacts to sensitive species and prevent barriers to wildlife movement (e.g., crossing widths shall be the minimum feasible and wetlands shall be bridged where feasible);
 - (dd) The least-damaging construction methods are utilized (e.g., staging areas shall be located outside of sensitive areas, work shall not be performed during the sensitive avian breeding season, noise attenuation measures shall be included and hours of operation shall be limited so as to comply with all applicable ordinances and to avoid impacts to sensitive resources);
 - (ee) The applicant shall prepare an analysis of whether the crossing could feasibly serve adjoining properties and thereby result in minimizing the number of additional crossings required by adjacent development; and
 - (ff) There must be no net loss of wetlands and any impacts to wetlands shall be mitigated at a minimum ratio of 3:1 (this shall include a minimum 1:1 creation component, while restoration/ enhancement of existing wetlands may be used to make up the remaining requirements for a total 3:1 ratio).
- (b) Wetland Buffer Areas. In the wetland buffer areas, permitted uses shall be limited to the following uses provided that there is no overall decrease in biological values and functions of the wetland or wetland buffer:
 - (1) Improvements necessary to protect adjacent wetlands.
 - (2) All uses permitted in wetland areas.

The study area contains 1.13 acres of RPO wetlands, all of which are off site in Escondido Creek (Table 4 and Figure 12). The off-site RPO wetlands consist of mule fat scrub, southern willow riparian forest, and coast live oak woodland that support wetland conditions. Anticipated improvements to Country Club Drive over Escondido Creek would be restricted to only those necessary to provide a safe crossing and enhance the biological and hydrological functions and services of the reach. The impacts would be primarily temporary and are necessary to remove the existing low-water crossing, construct the new span bridge, stabilize the channel embankment, and restore the riverine hydrology of the reach. During high flows, the existing low-water crossing becomes breached and not possible to cross by vehicle or other means, thereby stranding local residents who rely on that crossing to access Harmony Grove Road.

The anticipated improvements would include construction of a new bridge that would span the flood limits of the Creek and allow for safe passage for the existing residents and future residents of the Project that rely on Country Club Drive. The new bridge would further improve biological functions of the riparian corridor and Creek, providing improved passage for wildlife and benefits to downstream water quality in comparison to existing conditions. The new bridge would further reduce the likelihood of wildlife being harmed by vehicles at the crossing. As stated in Appendix G, the Draft MSCP North County Plan identifies two goals for Escondido Creek, both of which the project will be consistent with and provide for a superior condition compared to the existing baseline condition: (1) protect the Escondido Creek floodplain; and (2) maintain connectivity, particularly east-west, along Escondido Creek canyon by minimizing road and maintaining natural habitat (County 2009). The project has been specifically designed to avoid the Escondido Creek floodplain, with avoidance buffers of 100 feet from the edge of riparian canopy protected by an additional 100 feet of limited building zone easement, for a total setback of 200 feet. With the new span bridge and proposed restoration actions, the project would enhance the biological and hydrologic function of Escondido Creek at the Country Club Drive crossing to a condition superior to what currently exists, thereby enhancing the natural flow regime and habitat connectivity. The project further conserves east-west connectivity along Escondido Creek Canyon by maintaining natural habitat and further constraining widths beyond that which already exists. It conserves wildlife movement patterns across the southern portion of the site and within existing preserved lands and rural-zoned parcels immediately east of the site to access Escondido Creek.

In comparing different options, the replacement could be accomplished through either a new bridge or direct replacement in-place with a wider low-water crossing. Replacement in-place with a wider crossing would result in additional permanent loss of habitat and would not improve water quality, hydrology, or wildlife movement at the crossing. The bridge span represents the least environmentally damaging alternative to crossing the Creek and impacts to RPO wetland are necessary and unavoidable. Temporary impact areas would be restored and the areas would be expected to provide the equivalent or superior functions and services once the restored habitat has established. Permanent impact areas would be limited to small areas for bridge pilings and reinforced embankments, and would be compensated through on- and/or off-site establishment, re-establishment, rehabilitation, enhancement, and/or preservation of in-kind or like-functioning habitat in the region.

RPO section 86.604(f) regulates Sensitive Habitat Lands as follows:

(f) Sensitive Habitat Lands. Development, grading, grubbing, clearing or any other activity or use damaging to sensitive habitat lands shall be prohibited. The authority considering an application listed at Section 86.603(a) above may allow development when all feasible measures necessary to protect and preserve the sensitive habitat lands are required as a condition of permit approval and where mitigation provides an equal or greater benefit to the affected species.

Sensitive Habitat Lands are defined by the RPO as:

- Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State CEQA Guidelines (14 Cal. Admin. Code Section 15000 *et seq.*), including the area

which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor.

- “Unique vegetation community” refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, for example: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified by the CDFW listing of community associations.

Sensitive Habitat Lands in the study area include lands supporting the core on-site population of wart-stemmed ceanothus in the southern portion of the study area. The reason this habitat is considered a Sensitive Habitat Land is provided below.

- Southern mixed chaparral in the southern portion of the study area supporting the core on-site population of wart-stemmed ceanothus.
 - Within the southern portion of the study area, this community supports a core population of an estimated 21,150 wart-stemmed ceanothus individuals. Also present in this area are summer holly (15 individuals), San Diego sagewort (four individuals), and ashy spike-moss (four concentrations). These areas are “unique” in that they support rare plant species and they are considered sensitive by CDFW (2010). CDFW’s rarity ranking follows the NatureServe’s Heritage Methodology (NatureServe 2009) in which communities are given a G (global) and S (State) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities with a Rarity Ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by the CDFW. Southern mixed chaparral is ranked as G3 and S3. G3 is vulnerable and at moderate risk of extinction or elimination due to a restricted range, recent and widespread declines, or other factors. S3 is vulnerable due to a restricted range, recent and widespread declines, or other factors making it vulnerable to extirpation.

The remaining portions of the study area are not Sensitive Habitat Lands as they do not meet the Sensitive Habitat Lands definition. The remaining portions do not represent areas which are necessary to support a viable population of rare and endangered species in perpetuity, or which are critical to the proper functioning of a balanced natural ecosystem or which serve as a functioning wildlife corridor. The remaining portions of the study area are not unique and are not ranked by the CDFW (2010) as being sensitive or, for coast live oak woodland, are ranked G5 (secure) and S4 (apparently secure).

Although southern willow riparian forest, mule fat scrub, and coast live oak woodland occur in Escondido Creek, the habitat that occurs within the study area is not the highest quality and is disturbed from the existing low-water crossing and impacts associated with Harmony Grove

Village restoration efforts. Further, no least Bell's vireo were suspected to be breeding in the habitat during 2014 presence/absence surveys.

Although a single gnatcatcher breeding pair was found in the coastal sage scrub within the study area, the habitat is patchy and fragmented. Its preservation is not vital to support a viable population of gnatcatchers in perpetuity, especially considering the abundance of core habitat located further to the southeast around Lake Hodges, the south around Del Dios and Rancho Cielo, and the west and southwest in the Elfin Forest and Rancho La Costa area.

2.0 PROJECT EFFECTS

Direct impacts are immediate impacts resulting from permanent habitat removal. Direct impacts were quantified by overlaying the limits of project-related impacts on the biological resources map of the site. Indirect impacts are actions that are not direct removal of habitat, but affect the surrounding biological resources either as a secondary effect of the direct impacts (e.g., construction noise, runoff, nighttime lighting, fugitive dust, etc.) or as the cause of degradation of a biological resource over time (e.g., edge effects and adjacency issues). Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time.

Following County Guidelines, a total of 77.9 acres of the approximately 111-acre Project site would be considered impacted either by direct physical removal of the habitat as a result of the project, dedication of trail easement, or by further fragmenting and isolating the habitat. Some of the direct impacts would be temporary in nature; these areas would be impacted by Project grading and subsequently restored back to native habitat as a result of the Project. A total of 0.1 acre would be considered impact neutral due to location within an existing easement that would remain in place. The remaining 34.8 acres within the Project site would be placed in biological open space. A total of 4.6 acres of off-site impacts would occur as a result of anticipated improvements to Country Club Drive, including roadway widening and potential bridge construction at the existing Escondido Creek crossing. As with the Project's on-site direct impacts, some of the off-site impacts will be temporary in nature and restored back to native habitat, subject to applicable fuel modification requirements. For example, off-site impact areas that fall outside of permanent roadway (i.e., new paved areas and sidewalks), bridge (i.e., bridge piers, abutments, and bank stabilization), and required fuel modification features could be restored. This includes restoration of the temporary impact area within Escondido Creek, with the commitment to enhance and lift biological and hydrological functions and services, and provide a superior condition compared to that which currently exists. The new bridge would improve biological functions of the riparian corridor and Creek compared to the existing at grade crossing by providing improved passage for wildlife. It would further improve hydrology through the reach and provide benefits to downstream water quality. The Project also proposes several off-site utility connections, including potable water, reclaimed water, and sewer; however, these off-site facilities would be installed using narrow trenches located entirely within existing developed (paved) roadways, and as such, would have no effect on biological resources.

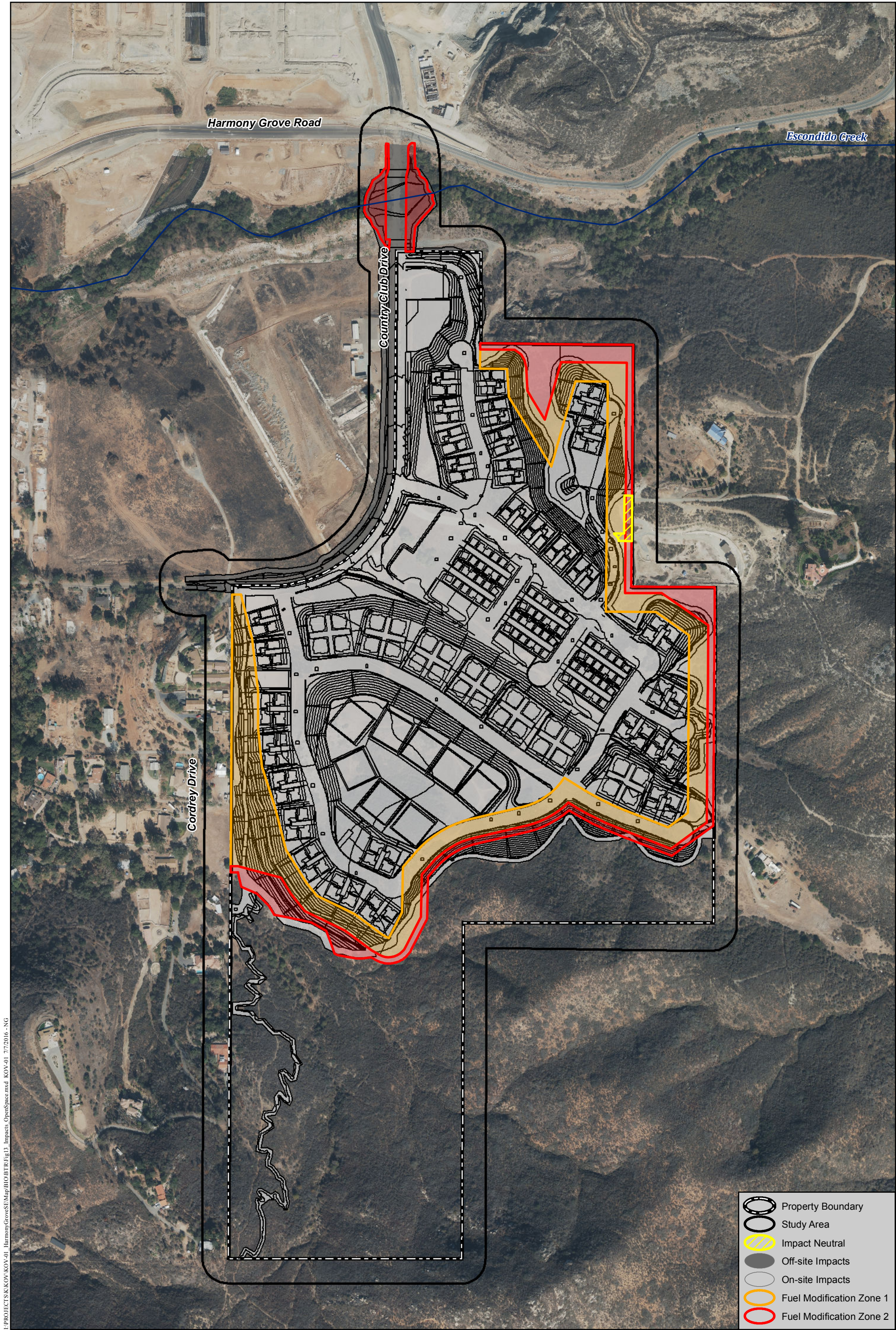
Figure 13 depicts the direct impact areas of the Project, including both on- and off-site impact areas where grading, fuel modification, and other physical disturbances to the land are proposed. Figure 14 depicts the direct impact areas in relation to the biological resources found within the study area. Figure 15 depicts the impacts of the Biologically Superior Alternative in relation to biological resources. Figure 16 provides a plan view and cross-section schematic of the new bridge over Escondido Creek. The proposed biological open space for the Project is depicted on Figures 14, 17, and 18. Figures 14 and 17 also depict the temporary impact areas that would be restored to Diegan coastal sage scrub and included in the biological open space with the proposed Project. In total, these restoration areas amount to approximately 1.8 acres of Diegan coastal sage scrub that will be established within the biological open space as a result of the proposed Project.

As depicted on Figure 15, the alternative would impact 64.6 acres of the site and place 46.5 acres in biological open space. There would be still be 0.4 acre of impact neutral area, and off-site impacts would be the same. Impacts to sensitive habitat types and areas occupied by sensitive species would be reduced. A wider swath of habitat along the eastern boundary of the site would also be conserved to provide additional on-site habitat for north-south wildlife movement. No on-site coastal sage scrub restoration or creation would occur as part of the Biologically Superior Alternative.

The Project has been designed to conserve high quality habitat in the southern portion of the study area that supports a core population of wart-stemmed ceanothus and directly connects to existing preserve lands and open space within the Del Dios Highlands Preserve.

As depicted on Figure 19, the Project is sited at the southern terminus of the larger Harmony Grove Village. The Project's development footprint abuts the boundary of Harmony Grove Village, such that the overall development in the local area is consolidated and the edge effect is minimized. The Project's siting of development and open space design conserves the core area and linkage functions in the region by concentrating development in the lower quality, non-native grasslands on the site, and minimizing edge effect by hugging up against Harmony Grove Village and existing developments to the west. Project development has been consolidated to reduce edge effects and concentrated in the portions of the site with the lowest, relative biological value. The proposed pad locations have been sited as far away from sensitive resources as possible. They are separated from open space and undeveloped areas by manufactured slopes, portions of which would be revegetated with native habitat, in addition to fuel modification zones, portions of which propose native habitat thinning and/or irrigation. The proposed developments will be situated at lower elevations, below the cut slopes and fuel modification areas, compared to the native habitat thinning and open space areas. Having the developments sit lower than the resources will help to prevent and minimize indirect effects of the project. Manufactured slopes and fuel modification zones are expected to provide some biological functions and values under post-project conditions, especially in buffering open space from proposed developments, preventing vehicle and pedestrian encroachment, and providing habitat for animal species known to the local area.

The proposed conservation design results in preservation of 34.8 acres of the approximately 111-acre site, which represents roughly 31 percent conservation. The design conserves the

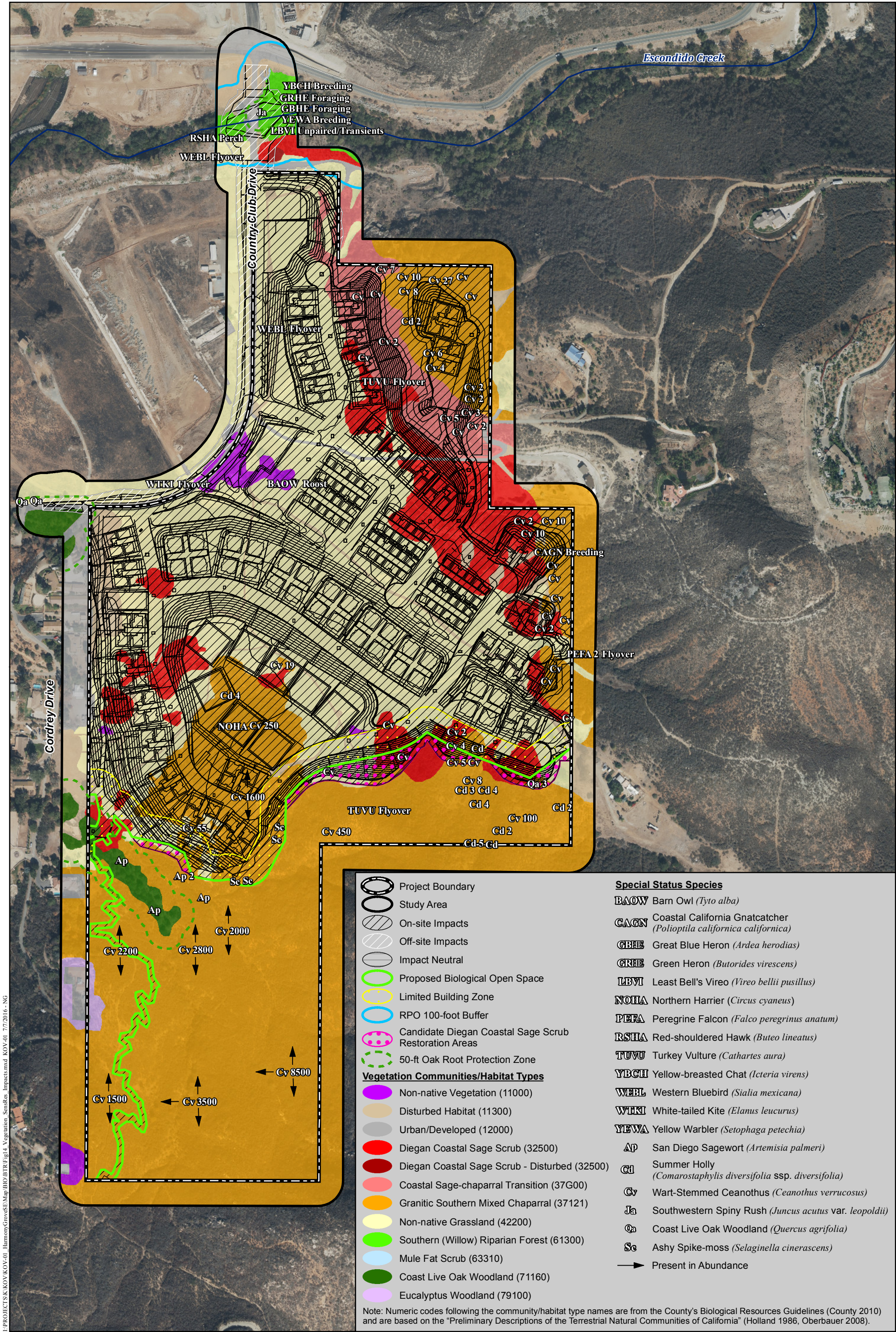


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- Property Boundary
- Study Area
- Impact Neutral
- Off-site Impacts
- On-site Impacts
- Fuel Modification Zone 1
- Fuel Modification Zone 2

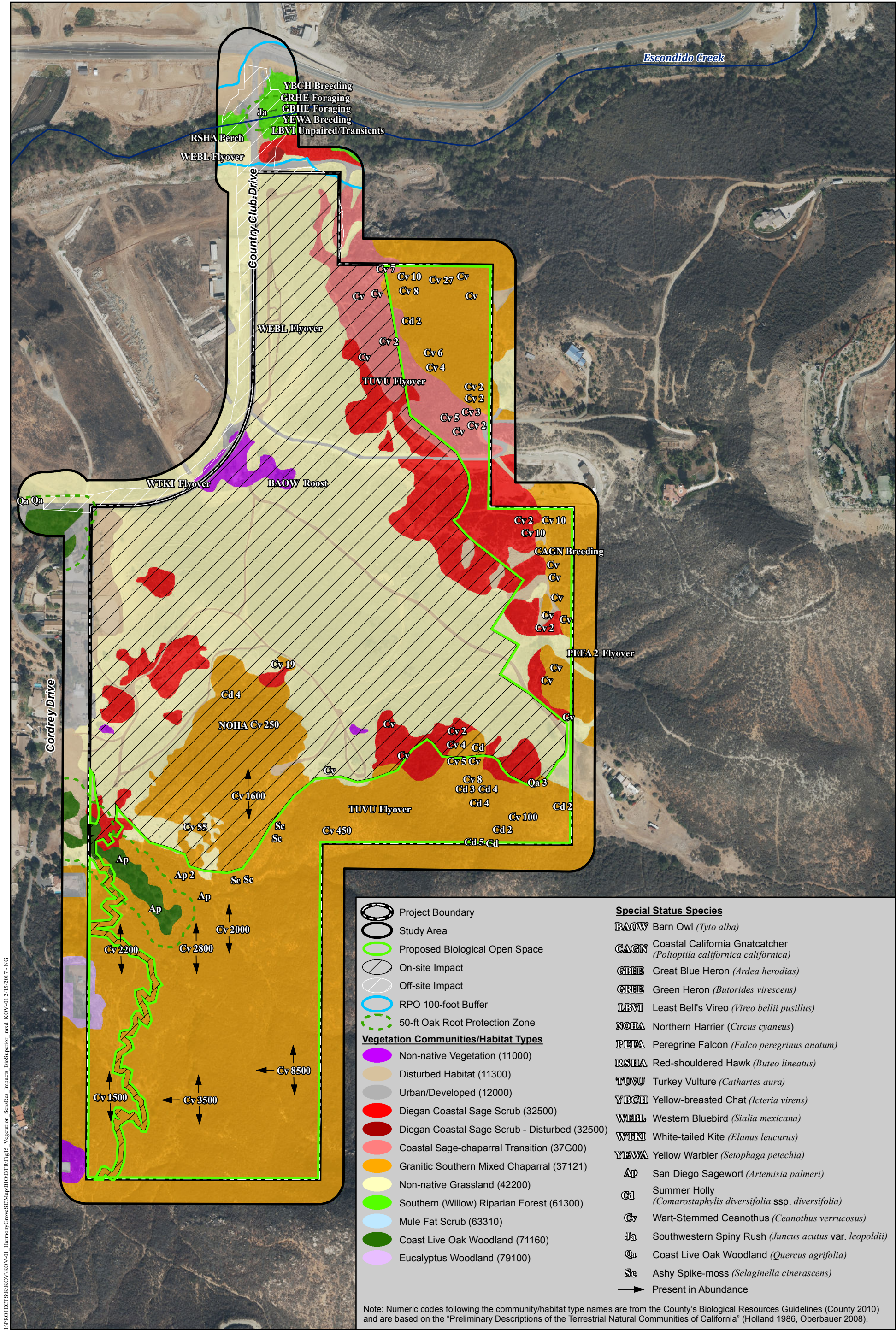
Project Impacts

HARMONY GROVE VILLAGE SOUTH



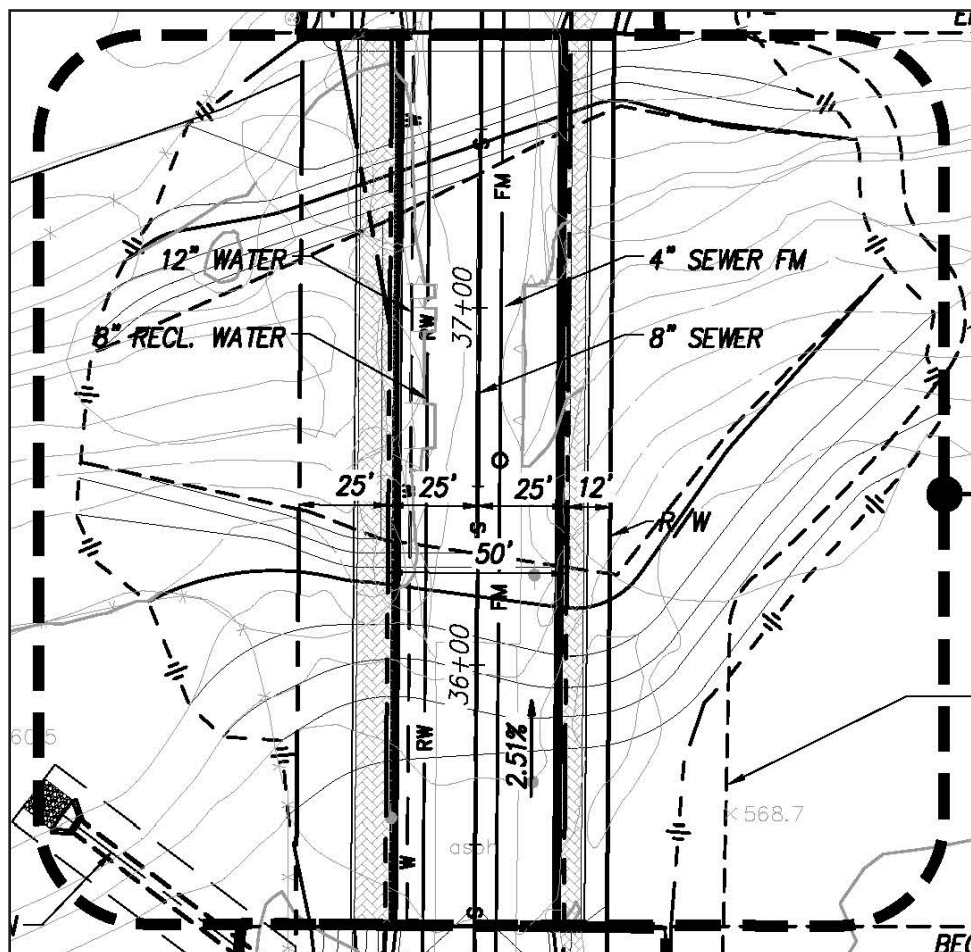
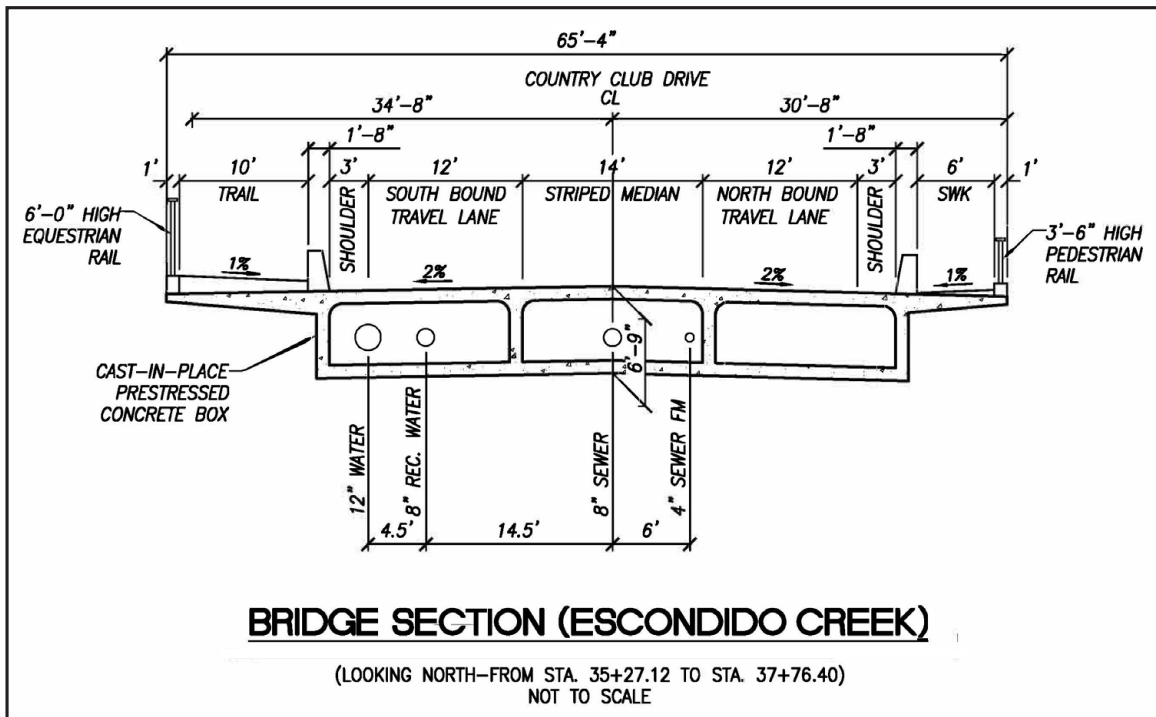
Proposed Project Vegetation and Sensitive Resources/Impacts

HARMONY GROVE VILLAGE SOUTH



Biologically Superior Alternative Vegetation and Sensitive Resources/Impacts

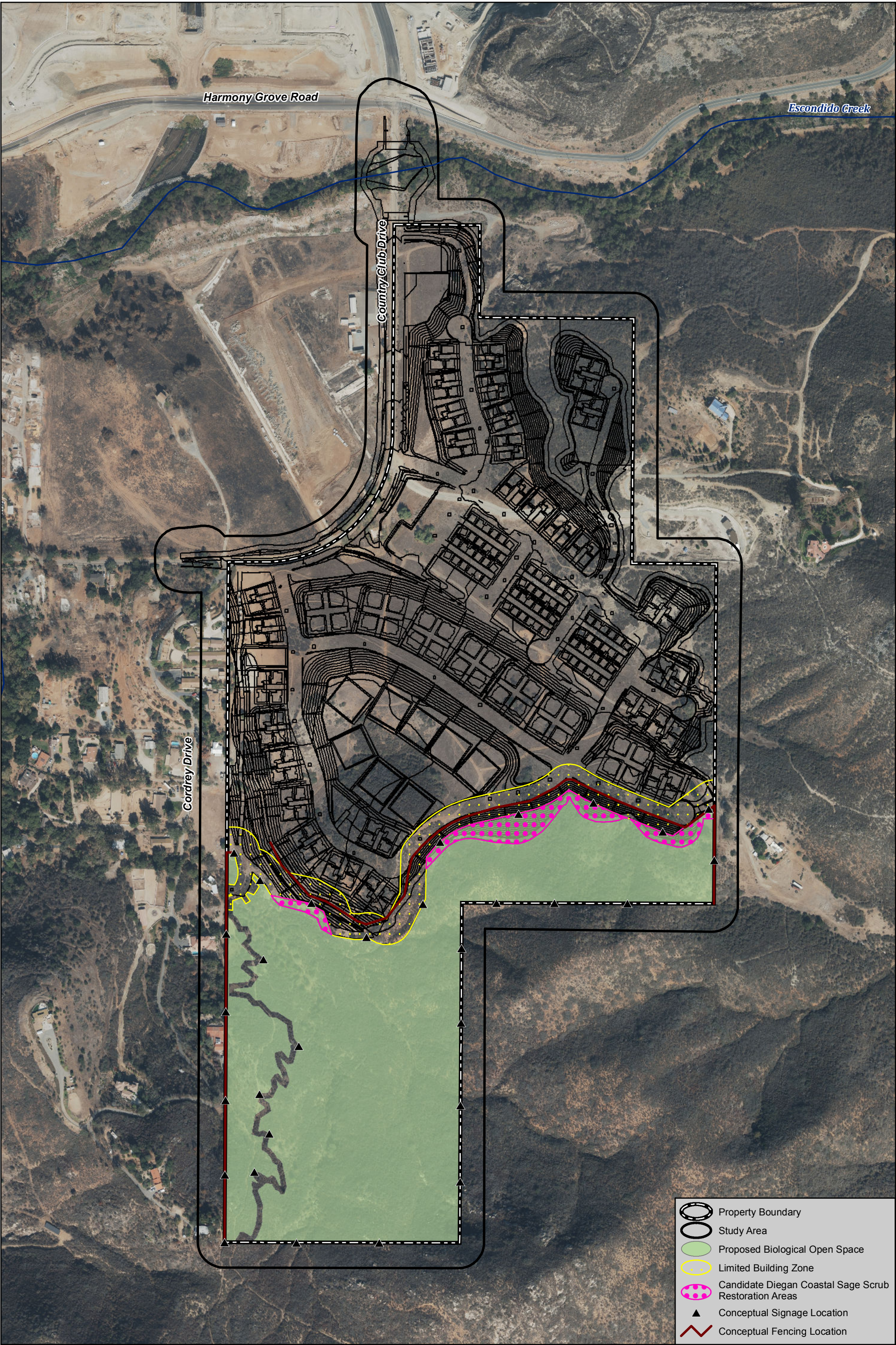
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Escondido Creek Bridge Schematic

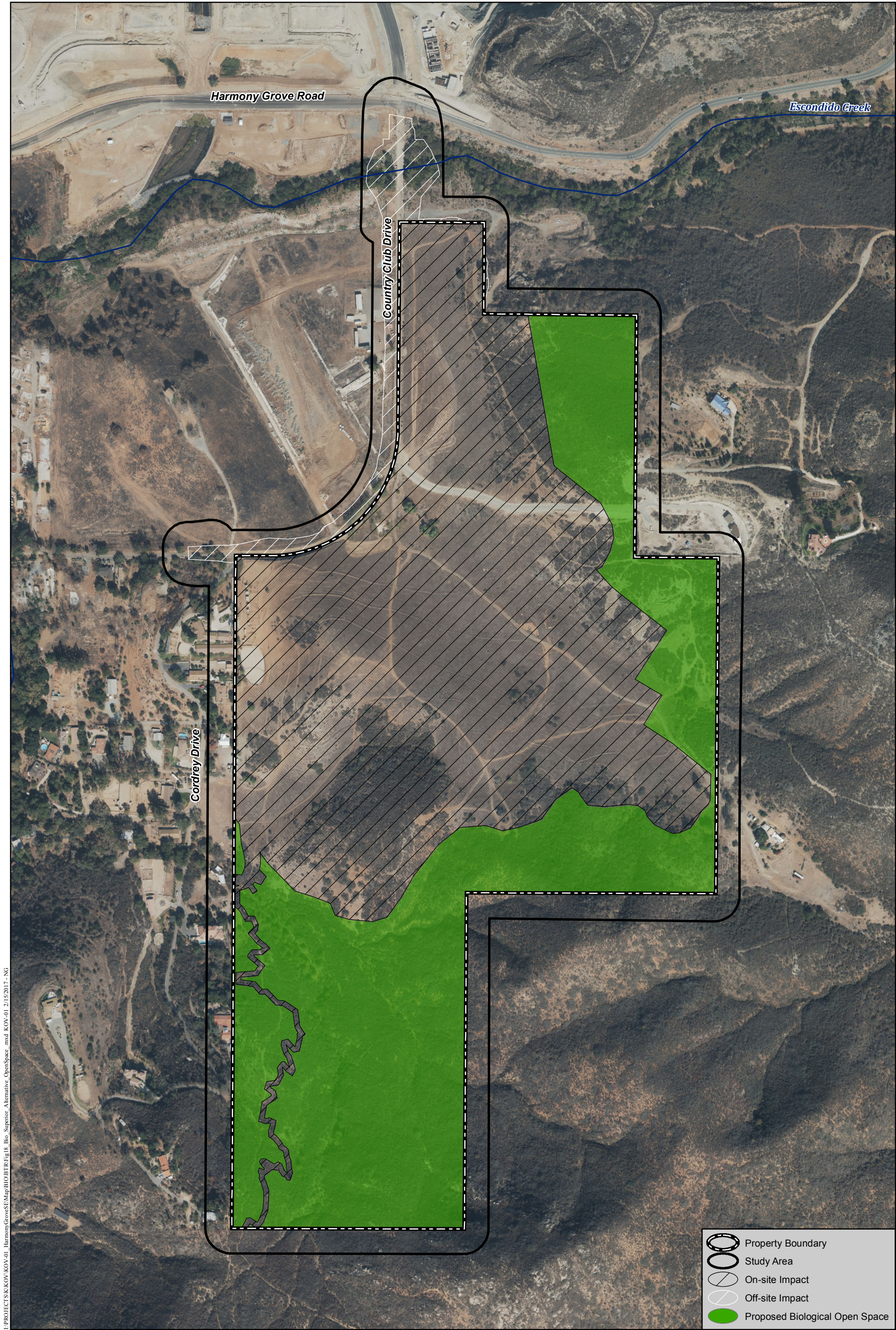
HARMONY GROVE VILLAGE SOUTH

Figure 16



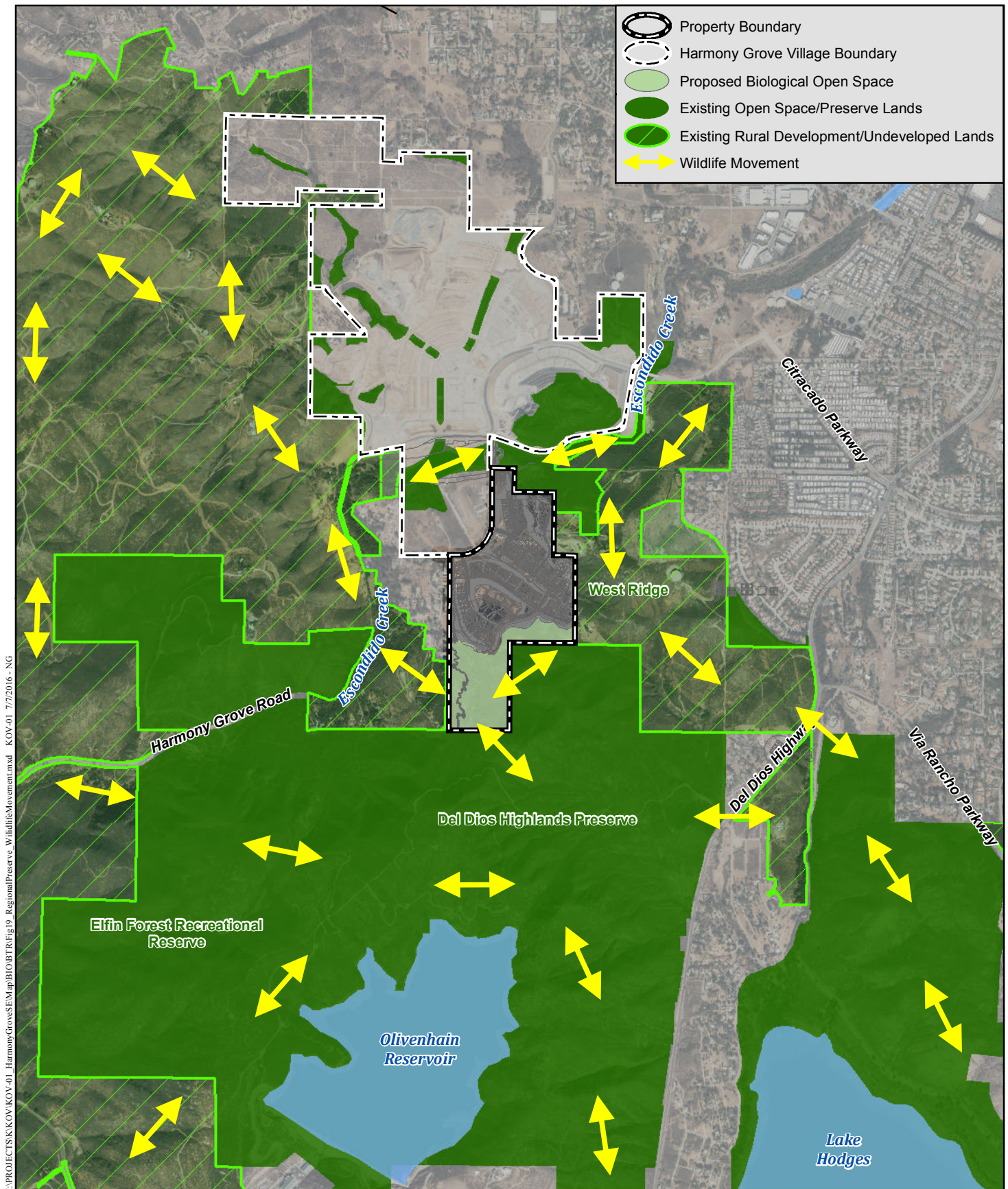
Proposed Project Biological Open Space

HARMONY GROVE VILLAGE SOUTH



Biologically Superior Alternative Biological Open Space

HARMONY GROVE VILLAGE SOUTH



Regional Preserve Lands/Wildlife Movement

HARMONY GROVE VILLAGE SOUTH

highest quality, intact chaparral habitat on the site, including southern mixed chaparral occupied by a major population of over 21,000 wart-stemmed ceanothus individuals. The habitat also supports San Diego sagewort, summer holly, and ashy spike-moss. This habitat is contiguous with the Del Dios Highlands Preserve and would expand the existing regional core area. The design also conserves several other native habitat types, including the majority of southern mixed chaparral on the site, coast live oak woodland, and several stands of Diegan coastal sage scrub. The design would conserve the existing wildlife movement functions of the site and surrounding area. Unobstructed access to the Del Dios Highlands Preserve, Elfin Forest Recreational Reserve, and surrounding core area would be maintained and enhanced through the Project's addition of contiguous open space. Wildlife would continue to have unobstructed mobility through the southern portions of the site with adequate cover and access to foraging and breeding areas. Access to Escondido Creek from areas south and southeast of the site would still be provided via undeveloped and rural lands further to the east of the site. Hydrologic functions and wildlife movement along Escondido Creek would be improved by the proposed clear-span bridge, which would provide much more space for water and aquatic and terrestrial wildlife at the crossing compared to the current at-grade crossing and culverts. With respect to the Draft MSCP North County Plan, the Project occurs within PAMA, but is consistent with the goals and objectives for the Harmony Grove Core Area, as summarized below in Section 2.2 and in Appendix G of this report.

The biologically superior alternative results in preservation of 46.5 acres, which represents roughly 46 percent conservation. In addition to conserving the highest quality, intact chaparral as described above, the alternative design would conserve the majority of the site's Diegan coastal sage scrub and coastal sage-chaparral transition. The biological open space would include the gnatcatcher pair nesting location observed in 2014 and would conserve additional habitat along the eastern boundary of the site to facilitate wildlife movement, improving access to Escondido Creek from the on-site open space and preserved areas south and southeast of the site. Unlike the proposed Project, the alternative would not restore graded slopes outside of fuel modification zones to coastal sage scrub and include them in biological open space. Instead, those graded slopes would be revegetated for erosion control and aesthetic purposes and maintained by the HOA, similar to other open space areas for the Project that are not biological open space areas.

2.1 SPECIAL STATUS SPECIES

2.1.1 Special Status Plant Species

The Project would result in impacts to the following special status plants: summer holly, a County List A species; wart-stemmed ceanothus, a County List B species; southwestern spiny rush, a County List D species; and ashy spike-moss, a County List D species. If unmitigated, the impacts on wart-stemmed ceanothus and summer holly would be considered significant. As further analyzed in Section 3.0 below, the project includes on-site preservation of both species at mitigation ratios that exceed County requirements. With the implementation of long-term management measures proposed herein, the impacts would be reduced to less than significant levels. Impacts to southwestern spiny rush and ashy spike-moss would be less than significant given that they are County List D species and the project would impact very low numbers of each species, as discussed further below.