



Kassab Travel Center Project

Appendix B

Habitat Assessment

**Habitat Assessment for
Kassab Travel Center
Assessor Parcel Numbers: 378-030-007, 378-030-009, and portions of 378-030-029 and 378-030-031 (Impact Area: 2.84 Acres; Total Area Surveyed: 2.84 Acres) in the City of Lake Elsinore, Riverside County, California
Elsinore USGS 7.5-Minute Series Map
Township 5 South, Range 4 West Section 31 and Range 5 West Section 36**

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Allison D. Rudalevige

Surveys Conducted On:
June 14, 2017

Report Date:
July 24, 2017
Revised March 15, 2018
Revised April 17, 2018

CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: 4/17/2018 SIGNED: Allison D. Rudalevige

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SECTION 1.0

COUNTY OF RIVERSIDE ATTACHMENTS

BIOLOGICAL REPORT SUMMARY SHEET

(Submit two copies to the County)


Applicant Name: Environmental Advisors
Assessor's Parcel Number (APN): 378-030-007, -009, -029, -031
APN cont. : _____
Site Location: Section: 31 and 36 Township: 5 South Range: 4 and 5 West
Site Address: 29301 Riverside Drive, Lake Elsinore, CA 92530
Related Case Number(s): _____ **PDB Number:** _____

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
	Arroyo Southwestern Toad	Yes	No	N/A
✓	Blueline Stream(s)	Yes	No	N/A
	Coachella Valley Fringed-Toed Lizard	Yes	No	N/A
	Coastal California Gnatcatcher	Yes	No	N/A
	Coastal Sage Scrub	Yes	No	N/A
	Delhi Sands Flower-Loving Fly	Yes	No	N/A
	Desert Pupfish	Yes	No	N/A
	Desert Slender Salamander	Yes	No	N/A
	Desert Tortoise	Yes	No	N/A
	Flat-Tailed Horned Lizard	Yes	No	N/A
	Least Bell's Vireo	Yes	No	N/A
	Oak Woodlands	Yes	No	N/A
	Quino Checkerspot Butterfly	Yes	No	N/A
✓	Riverside Fairy Shrimp	Yes	No	N/A
	Santa Ana River Woollystar	Yes	No	N/A
	San Bernardino Kangaroo Rat	Yes	No	N/A
	Slender Horned Spineflower	Yes	No	N/A
	Stephen's Kangaroo Rat	Yes	No	N/A
✓	Vernal Pools	Yes	No	N/A
✓	Wetlands	Yes	No	N/A

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
✓	Other: Riparian Habitat	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened or candidate species by either State, or Federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (NDDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report.



Signature and Company Name

3/16/2018

Report Date

10(a) Permit Number (if applicable)

Permit Expiration Date

County Use Only

Received by: _____ Date: _____
PD-B# _____

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources
(Submit Two Copies)

Case Number: _____ **Lot/Parcel No.** 378-030-007, -009, -029, -031 **EA Number** _____

Wildlife & Vegetation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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(Check the level of impact the applies to the following questions)

- a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?
☐ ☐ ☒ ☐
- b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?
☐ ☐ ☐ ☒
- c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?
☐ ☐ ☒ ☐
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?
☐ ☐ ☒ ☐
- e) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?
☐ ☐ ☐ ☒
- f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
☐ ☐ ☐ ☒
- g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
☐ ☐ ☐ ☒

Source: CGP Fig. VI.36-VI.40

Findings of Fact:

1. No Riparian/Riverine Resources, vernal pools, jurisdictional waters under the regulatory authority of the USACE and/or the CDFW would be impacted by the proposed project. Riparian habitat is adjacent to the west.
2. Nests of raptors and migratory birds may be impacted by the proposed project.

Proposed Mitigation:

1. Follow guidelines in Section 6.1.4 for Urban/Wildland Interface issues and in Section 7.5.3 for construction minimization measures.

Monitoring Recommended:

1. A pre-construction survey(s) for nesting birds and raptors is needed prior to any construction activities that occur during the nesting season (generally February 1 through June 30).

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Biological Resources Map

Kassab Travel Center



Attachment E-5



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Ruderal vegetation in the southwest corner of the survey area, facing northwest.



Ruderal vegetation (background) and bare ground (foreground) in the northeast corner of the survey area, facing southwest.



Ornamental trees in the center of the survey area.

Representative Photographs

Kassab Travel Center

Attachment E-6

SECTION 2.0
HABITAT ASSESSMENT

This report presents the findings of a habitat assessment for the Kassab Travel Center project (hereinafter referred to as the “proposed project”) located in the City of Lake Elsinore in Riverside County, California. The proposed project consists of a proposed travel center that includes a 6,000-square-foot convenience store with 3 quick serve restaurants; 2 covered gas-dispensing areas totaling 5,264 square feet; and a free-standing, 2,543-square-foot fast food restaurant with drive through.

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requires that project sites be evaluated for a number of factors to assess how they meet MSHCP criteria. This information is used to determine whether a project site should be acquired as part of the habitat reserve or whether it should be allowed for development. The biological resources evaluation also assists the Lead Agency in determining whether additional mitigation would be required for Criteria Area or Additional Survey Needs Species. According to the Riverside County Integrated Project (RCIP) Conservation Summary Report Generator, the proposed project is located in designated MSHCP “Criteria Area” Cell 4266. The general habitat assessment for the proposed project includes assessments for riparian/riverine areas (and associated species) and vernal pools (and associated species) pursuant to MSHCP Section 6.1.2; urban/wildlands interface issues pursuant to MSHCP Section 6.1.4; and areas under the jurisdictions of the U.S. Army Corps of Engineers (USACE) and/or the California Department of Fish and Wildlife (CDFW) as discussed in MSHCP Section 6.1.2. This report has been prepared in accordance with the MSHCP guidelines.

GENERAL SITE INFORMATION

The proposed project is located at the southwest corner of Collier Avenue and Riverside Drive in the City of Lake Elsinore in Riverside County, California (Exhibit 1). The 2.84-acre survey area consists of Assessor Parcel Numbers (APNs) 378-030-007, 378-030-009, and portions of 378-030-029 and 378-030-031. It is on the U.S. Geological Survey’s (USGS’) Elsinore 7.5-minute quadrangle at Township 5 South, Range 4 West, Section 31 and Range 5 West, Section 36 (Exhibit 2). Topography in the survey area is flat with elevations ranging from approximately 1,262 to 1,268 feet above mean sea level. Two soil types, Garretson very fine sandy loam (0 to 2 percent slopes) and Pachappa fine sandy loam (0 to 2 percent slopes) occur in the survey area (Exhibit 3). Surrounding land uses consist of undeveloped open space and commercial development. Alberhill Creek occurs less than 1,000 feet west of the survey area.

MSHCP Elsinore Area Plan (Subunit 3 – Elsinore)

The survey area is partially located in Subunit 3 (Elsinore) of the Western Riverside County MSHCP’s Elsinore Area Plan (Dudek 2003). The target conservation acreage range for the Elsinore Area Plan is 66,500 to 73,315 acres, the target acreage for Additional Reserve Lands within Subunit 3 is 925 to 1,815 acres, and the target acreage within the City of Lake Elsinore is 4,830 to 7,870 acres.

The Elsinore Area Plan contains the following Cores and Linkages:

- All of Proposed Constrained Linkage 5
- All of Proposed Constrained Linkage 6
- Most of Proposed Core 1
- A portion of Proposed Extension of Existing Core 2
- All of Proposed Extension of Existing Core 3
- All of Proposed Linkage 1
- All of Proposed Linkage 2
- A portion of Proposed Linkage 3

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Project Location

Kassab Travel Center

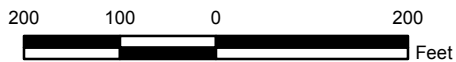
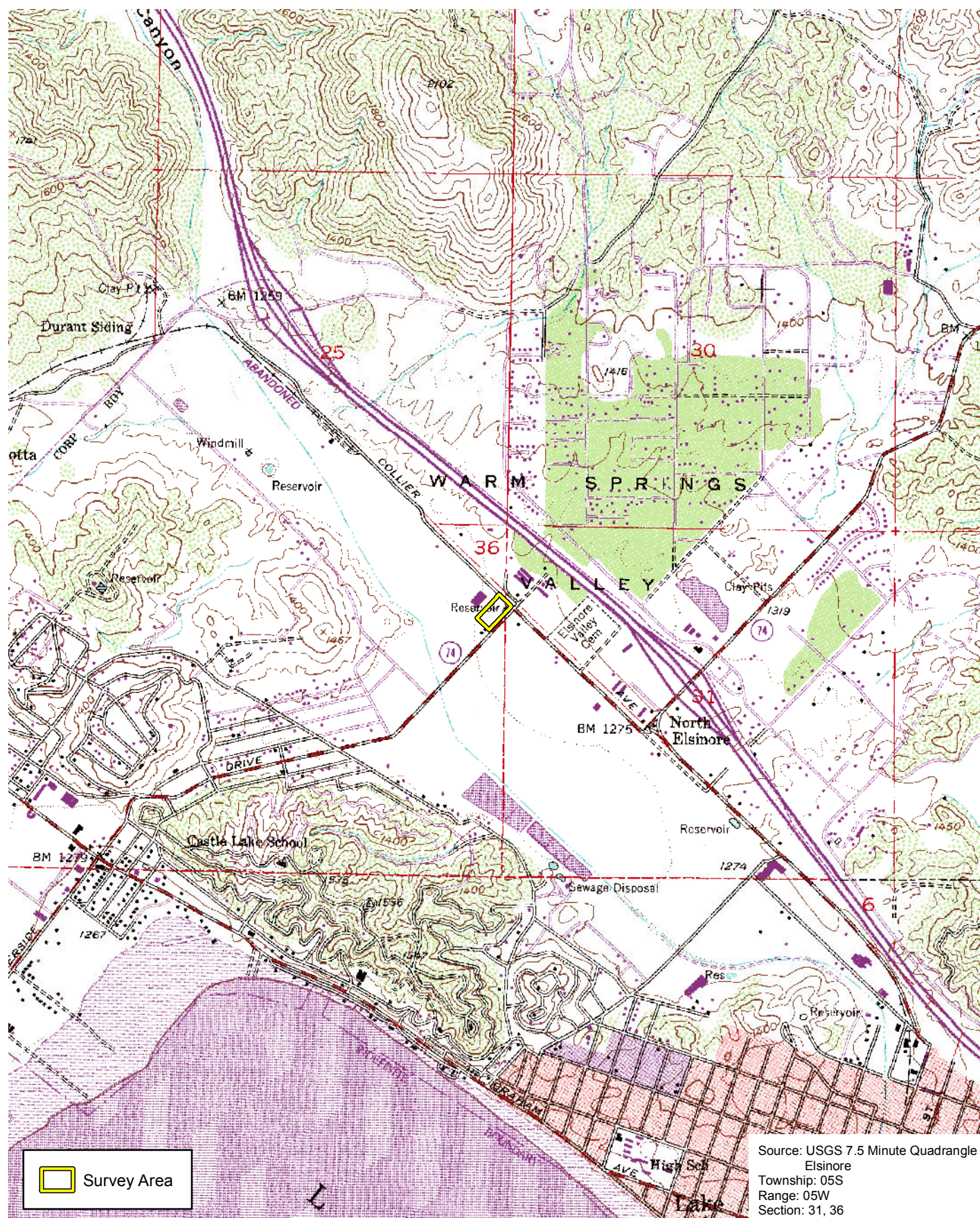


Exhibit 1



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USGS 7.5-Minute Digital Quadrangle

Kassab Travel Center



2,000 1,000 0 2,000
Feet

Exhibit 2



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Soil Types

Kassab Travel Center

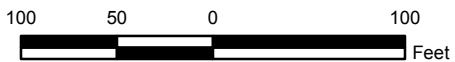


Exhibit 3



- A portion of Proposed Linkage 7
- A large portion of Proposed Linkage 8

The Planning Species for Subunit 3 (Elsinore) consist of:

- American bittern (*Ixobrychus exilis*)
- Bell's [sage] sparrow (*Artemisiospiza belli*)
- black-crowned night heron (*Nycticorax nycticorax*)
- double-crested cormorant (*Phalacrocorax auritus*)
- least Bell's vireo (*Vireo bellii pusillus*)
- loggerhead shrike (*Lanius ludovicianus*)
- mountain plover (*Charadrius montanus*)
- northern harrier (*Circus cyaneus*)
- osprey (*Pandion haliaetus*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)
- white-faced ibis (*Plegadis chihi*)
- Quino checkerspot butterfly (*Euphydryas editha quino*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- Bobcat (*Lynx rufus*)
- western pond turtle (*Emys marmorata*)
- Munz's onion (*Allium munzii*)
- San Diego ambrosia (*Ambrosia pumila*)
- smooth tarplant (*Centromadia pungens* ssp. *laevis*)

The Biological Issues and Considerations for Subunit 3 (Elsinore) consist of:

- Conserve wetlands including Temescal Wash, Collier Marsh, Alberhill Creek, Lake Elsinore and the floodplain east of Lake Elsinore (including marsh Habitats) and maintain water quality.
- Conserve clay soils supporting Munz's onion.
- Conserve Travers-Willow-Domino soil series.
- Conserve foraging Habitat for raptors, providing a sage scrub-grassland ecotone.
- Conserve grassland Habitat for mountain plover.
- Conserve breeding Habitat for northern harrier.
- Maintain linkage area for bobcat.
- Conserve San Diego ambrosia at Alberhill and Nichols Road or find new populations that would allow for loss of known populations.
- Maintain Core and Linkage Habitat for western pond turtle.
- Maintain Core Area for Riverside fairy shrimp.
- Maintain opportunities for Core and Linkage Habitat for Quino checkerspot butterfly.

The survey area overlaps the eastern edge of Criteria Cell 4266 (Exhibit 4). Cell 4266 contributes to the assembly of Proposed Linkage 2. Proposed Linkage 2 is comprised of wetland habitat associated with Collier Marsh in the City of Lake Elsinore. It supports key populations of the following species: San Diego ambrosia (*Ambrosia pumila*), least Bell's vireo, yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), downy woodpecker (*Picoides pubescens*), and southwestern willow flycatcher (Dudek 2003). Maintenance of wetland functions and values and water quality of Collier Marsh is important for these species. Areas not affected by edge within this Linkage total approximately 70 acres of the total 160 acres occupied by this Linkage. Since this Linkage may be affected by edge, treatment and management of edge conditions will be necessary to ensure that land uses adjacent to the Linkage do not degrade water quality or inhibit floodplain processes.

Conservation within Cell 4266 will focus on meadow, marsh, riparian scrub, woodland, and forest habitat along Alberhill Creek and adjacent grassland habitat. Conserved areas will connect to meadow, marsh, and grassland proposed for conservation in Cell 4169 to the north. Conservation in the cell ranges from 30 to 40 percent of the cell, focusing on the western portion of the cell. Areas designated as Public/Quasi-Public Lands are located approximately 0.5 mile to the southwest of the survey area.

METHODS

Vegetation Mapping and General Surveys

A literature review was conducted prior to the field survey to identify special status plant and wildlife species known to occur in the project vicinity. The California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants (CNPS 2017) and the CDFW's California Natural Diversity Database (CNDDB) (CDFW 2017a) were reviewed and included the USGS Alberhill and Lake Elsinore 7.5-minute quadrangles. The RCIP Conservation Summary Report Generator was run to determine MSHCP requirements using APNs 378-030-007, 378-030-009, 378-030-029, and 378-030-031. In addition, the U.S. Department of Agriculture, Natural Resources Conservation Service's (USDA NRCS') Web Soil Survey for the Western Riverside Area was reviewed to determine whether suitable soils are present to support special status plant and wildlife species.

The habitat assessment was conducted on June 14, 2017, by Psomas Senior Biologist Allison Rudalevige. The weather was sunny with a temperature of 85 degrees Fahrenheit and winds of 1–3 miles per hour. The habitat assessment was conducted by walking the survey area and recording plant and wildlife species observed. Vegetation was mapped in the field on an aerial photograph at a scale of 1 inch equals 100 feet (1"=100'). Vegetation types were mapped and generally follow categories outlined in the Western Riverside County MSHCP Habitat Accounts (Dudek 2003). Photographs were also taken during the habitat assessment (see Attachment E-6).

All plant and wildlife species observed were recorded in field notes. Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys in Baldwin et al. (2012), Hickman (1993), and Munz (1974). Nomenclature of plant taxa conform to the CDFW's *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2017c) for special status species and Jepson eFlora (Jepson Flora Project 2015) for all other taxa.

All wildlife species detected during the course of the surveys were documented in field notes. Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing rocks and debris. Birds were identified by using visual and auditory recognition. Surveys for mammals were conducted during the day and included searching for and identifying diagnostic sign, including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Taxonomy and nomenclature for wildlife conform to the CDFW's *Special Animals List* (CDFW 2017b) for special status species; nomenclature for non-special status wildlife generally follows Collins and Taggart (2009) for amphibians and reptiles, American Ornithologists' Union (2015) for birds, and Smithsonian National Museum of Natural History (2011) for mammals.

EXISTING CONDITIONS

Vegetation Types and Other Areas

The following vegetation type and other landcovers occur in the survey area: ruderal, bare ground, and developed (Exhibit 5; Table 1).

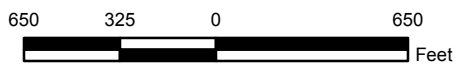
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Aerial Source: Esri 2016

Western Riverside County Multiple Species Habitat Conservation Plan Kassab Travel Center

Exhibit 4



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Aerial Source: Esri 2016

Biological Resources

Kassab Travel Center



Exhibit 5



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TABLE 1
VEGETATION TYPES AND OTHER LANDCOVER IN THE SURVEY AREA

Vegetation Type or Other Landcover	Amount in the Survey Area (acres)
ruderal	2.34
bare ground	0.43
developed	0.07
Total	2.84

Ruderal (weedy) vegetation occurs throughout much of the survey area. The dominant species are grayish shortpod mustard (*Hirschfeldia incana*) and London rocket (*Sisymbrium irio*). Other common herbaceous species include fiddleneck (*Amsinckia* sp.), Russian thistle (*Salsola tragus*), and annual bur-sage (*Ambrosia acanthicarpa*). Evidence of ground-disturbance (e.g., mowing, tilling) during a prior season was noted during the survey; vegetation had not been disturbed this season. Ornamental China berry (*Melia azedarach*) trees occur in the center of the survey area along with a few small Mexican palo verde (*Parkinsonia aculeata*). Ruderal vegetation follows the non-native grassland subassociation of the Grasslands vegetation association of the MSHCP habitat accounts (Dudek 2003).

Unvegetated areas consist of bare ground and developed. The portion of the survey area adjacent to Riverside Drive is bare, while a paved sidewalk is adjacent to Collier Avenue. These areas correspond to the Residential/Urban/Exotic vegetation association of the MSHCP habitat accounts (Dudek 2003).

Wildlife

The survey area provides low quality habitat for wildlife species due to the lack of native plant communities, the disturbed (i.e., tilled) nature of the survey area, and surrounding urban development. Wildlife species present are expected to be relatively urban tolerant and acclimated to human activity.

No waterbodies or water courses were observed in the survey area; therefore, fish and amphibian species are not expected to occur.

No reptile species were observed during the survey; common species that may occur in the survey area include the western fence lizard (*Sceloporus occidentalis*), western side-blotched lizard (*Uta stansburiana elegans*), and gopher snake (*Pituophis catenifer*).

Say's phoebe (*Sayornis saya*) was the only bird species observed during the survey. Other common bird species that may occur include mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorrhous mexicanus*), and lesser goldfinch (*Spinus psaltria*). Common raptor species such as red-tailed hawk (*Buteo jamaicensis*) may forage in the survey area.

The only mammal species observed during the survey was California ground squirrel (*Otospermophilus beecheyi*). Other common mammal species that may occur in the survey area include Botta's pocket gopher (*Thomomys bottae*), Virginia opossum (*Didelphis virginiana*), common raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Bat species that forage

and roost in urban areas, such as the big brown bat (*Eptesicus fuscus*), may occur in the survey area.

Wildlife Movement

The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. Wildlife movement corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources.

The survey area is located in an urban setting with open space, including riparian vegetation, located to the south and west. The survey area lacks native vegetation cover and is on the edge of a developed area. Wildlife species occurring in the survey area are expected to be relatively urban tolerant and acclimated to human activity given the surrounding development. The site is not fenced; therefore, wildlife may move into the survey area. Riverside Drive, Collier Avenue, and an existing building limit movement from the southeast, northeast, and northwest, respectively; therefore, the site itself would not function as a movement corridor between larger areas of open space.

Proposed Linkage 2 occurs approximately 600 feet west of the survey area. The proposed project would not directly impact this linkage. Indirect impacts on wildlife movement (e.g., edge effects) from construction noise, human activity, and ongoing use of the site is expected to be limited due to the proposed project site’s distance (600 feet) from this linkage.

SPECIAL STATUS RESOURCES

Special status resources include plant and wildlife species and vegetation types. These species have generally been afforded this recognition by federal and State resource agencies and by private conservation organizations (e.g., the CNPS). In general, the principal reason an individual taxon (e.g., species, subspecies, or variety) is given such recognition is a documented or perceived decline or limitation of its population size, geographic range, and/or distribution that results, in most cases, from habitat loss.

The Riverside County Board of Supervisors approved the MSHCP in 2003 and received permitting approval from the U.S. Fish and Wildlife Service (USFWS) in June 2004. This plan establishes Criteria Areas (i.e., reserves) to adequately conserve many species listed as Threatened and Endangered by the USFWS and the CDFW. Impacts on Covered Species would be considered fully mitigated with the City’s participation in the MSHCP program. With the exception of a few species (e.g., least Bell’s vireo, which is a Riparian/Riverine species), focused surveys are not required for Covered Species and no additional permitting would be necessary.

Riparian/Riverine Resources

As defined by Section 6.1.2 of the MSHCP, Riparian/Riverine areas are lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur

close to or depend upon soil moisture from a nearby fresh water source or areas with fresh water flow during all or a portion of the year (Dudek 2003).

No rivers, streams, or other watercourses (or vegetation associated with these features) were observed in the survey area. The closest riparian vegetation is located in a flood-control channel less than 200 feet southwest of the survey area; denser, more mature riparian habitat associated with Collier Marsh (and included as part of Proposed Linkage 2) occurs in Alberhill Creek, approximately 600 feet west of the survey area. The proposed project would not directly impact this linkage, wetland habitat associated with Collier Marsh, or habitat of key plant and wildlife populations associated with this proposed linkage (i.e., San Diego ambrosia, least Bell's vireo, yellow warbler, yellow-breasted chat, downy woodpecker, and southwestern willow flycatcher). Since the proposed project would not directly impact Riparian/Riverine areas, a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not required.

While the proposed project would not directly impact riparian bird species (least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo) by removing their habitat, construction noise and human activity may indirectly impact riparian bird species if they occur in the flood-control channel's adjacent riparian habitat, approximately 200 feet southwest of the proposed project site. These activities are not expected to impact species in Alberhill Creek, since it is more than 500 feet from proposed project activities. Indirect impacts on riparian bird species could be avoided or minimized if construction activities, or at least the most noise-intensive portions of construction, can be limited to the season when these migratory birds are not present in California (i.e., September 16 to March 14). While indirect impacts should be avoided, if possible, there is no requirement to limit construction timing adjacent to riparian habitat.

Construction-related minimization measures provided in Section 7.5.3 of the MSHCP (see Appendix A) would minimize indirect impacts to adjacent riparian or riverine resources by requiring Best Management Practices (BMPs) to protect water quality.

Guidelines in Section 6.1.4 of the MSHCP (see Appendix B) would be required to ensure that adjacent riparian/riverine habitats are not indirectly impacted by long-term changes in water quality, increased noise, or increased night lighting. A further discussion of these indirect impacts is provided below.

"Waters of the U.S."/"Waters of the State"

Section 404 of the Federal Clean Water Act (CWA) and Section 1602 of the *California Fish and Game Code* regulate activities affecting resources under the jurisdiction of the USACE and the CDFW, respectively. "Waters of the U.S.", under the jurisdiction of the USACE include navigable coastal and inland waters, lakes, rivers, streams, and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. The CDFW has jurisdictional authority over resources associated with rivers, streams, and lakes. Section 401 of the CWA provides the Regional Water Quality Control Board (RWQCB) with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water quality. The RWQCB also has jurisdiction over isolated wetlands and waters under the Porter-Cologne Water Quality Control Act.

No drainages, waterbodies, or other water resources under the regulatory authority of the USACE, the CDFW, or the RWQCB were observed in the survey area. Therefore, there would be no impacts on jurisdictional resources and no permits, agreements, or certifications would be required from these agencies.

Vernal Pools

As defined by Section 6.1.2 the MSHCP, vernal pools are seasonal wetlands that occur in sunken areas that have wetland soils, vegetation, and hydrology during the wetter portion of the growing season, but lack hydrology and/or vegetation during the drier portion of the year (Dudek 2003).

No basins, ponds, or obvious depressional features were observed during the survey. However, a small area exhibiting surface soil cracks was present in the southwest portion of the survey area. Surface soil cracks, where clay sediment is deposited by infiltration and evaporation of water, are an indicator of hydrology and possible ponding. If the area holds surface water, it may provide habitat for vernal pool branchiopods (i.e., fairy shrimp). One fairy shrimp, Riverside fairy shrimp (*Streptocephalus woottonii*), was reported from the literature review in the project vicinity (CDFW 2017a).

Given that the survey was conducted during the dry season, it was not possible to directly determine whether this area holds water for any length of time. However, it is unlikely that the area ponds. A review of aerial Google Earth¹ imagery shows no indication of surface water or soil saturation over multiple years and seasons. In addition, the soil type mapped in the survey area is not considered hydric (USDA NRCS 2017). This area would not be considered a “vernal pool” because indicator plant species (e.g., woolly-marbles [*Psilocarphus brevissimus*], toad rush [*Juncus bufonius*], or water crassula [*Crassula aquatica*]) are not likely to be present; plant species observed in the immediate area consist of horseweed (*Erigeron canadensis*), stinknet (*Oncosiphon piluliferum*), annual bur-sage, and grayish shortpod mustard, which are considered upland or facultative upland species. For these reasons, fairy shrimp are not expected to occur in the survey area.²

Criteria Area, Narrow Endemic, and Other Special Status Plant Species

According to the RCIP Summary Report Generator, focused plant surveys are not required for Criteria Area or Narrow Endemic plant species.³ Based on the literature review, nine species not covered by the MSHCP (as shown in Section 6.1.3) have been reported in the vicinity of the survey area: chaparral sand-verbena (*Abronia villosa* var. *aurita*), sticky dudleya (*Dudleya viscida*), Tecate cypress (*Hesperocyparis forbesii*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Robinson’s peppergrass (*Lepidium virginicum* var. *robinsonii*), intermediate monardella (*Monardella hypoleuca* ssp. *intermedia*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), San Bernardino aster (*Symphyotrichum defoliatum*), and California screw moss (*Tortula californica*). Given the ruderal nature of the survey area and apparent periodic ground disturbance, these species are not expected to occur in the survey area. Therefore, there would be no impact on these species, and no mitigation would be required.

Smooth tarplant (*Centromadia pungens* ssp. *laevis*), a species with a California Rare Plant Rank of 1B.1, has potential to occur in the survey area because suitable habitat and soils for the species are present. In addition, it was reported to occur in a disturbed lot less than 1,000 feet away. Smooth tarplant is a Criteria Area species covered by the MSHCP. Because the survey area is located outside an “Additional Survey Needs Area” for smooth tarplant (Exhibit 4), any impacts on the species, if present, would be considered mitigated with the City’s participation in the MSHCP.

¹ Images were reviewed from May 1994; May 2002; January, September, and October 2004; December 2005; January and June 2006; June and November 2009; March 2011; June 2012; January, March, and November 2013; April and September 2014; and February and October 2016.

² It should be noted that the surveying Biologist holds a 10(a) permit to survey for fairy shrimp.

³ The Criteria Area and Narrow Endemic plant survey boundary overlaps a portion of APNs 378-030-029 and 378-030-031; however, the survey area does not extend into this area.

Special Status Wildlife Species

According to the RCIP Summary Report Generator, focused surveys are not required for burrowing owl or other Additional Survey Needs species⁴ (Exhibit 4). Impacts to all other special status wildlife species with potential to occur in the survey area that would typically require mitigation in California Environmental Quality Act (CEQA) documentation are covered by the City's participation in the MSHCP.

Stephens' Kangaroo Rat

In response to the federal listing of Stephens' kangaroo rat (*Dipodomys stephensi*), the Riverside County Habitat Conservation Agency (RCHCA) was formed. Its purpose is to acquire and manage habitat for the Stephens' kangaroo rat and other associated special status species. The RCHCA Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) was developed to meet the requirements of the program's Federal Endangered Species Act Section 10(a) permit. The HCP for this species is managed by the RCHCA. The HCP establishes a Reserve System where activities in the core reserve areas are limited and/or restricted. Areas outside the Reserve System are within a designated Fee Area.

The survey area is located within a designated Fee Area. For projects within a Fee Area, focused surveys for the Stephens' kangaroo rat are not required, and all potential impacts are mitigated through the RCHCA.

OTHER ISSUES

Urban/Wildlands Interface Issues

Indirect impacts, often called "edge effects", are those that affect the quality of nearby wildlife habitat resulting from disturbance by construction (such as noise, dust, and urban pollutants) and/or the long-term use of the site. Development in proximity to the MSHCP Conservation Area may result in edge effects that adversely affect biological resources within the MSHCP Conservation Area. The text below each subheading states the objective of each of these measures as described in the MSHCP.

The proposed project partially overlaps MSHCP Criteria Cell 4266 (2.67 acres within the Cell, 0.17 acre outside the Cell). Lands within Cell 4266 would provide for Proposed Linkage 2, which occurs approximately 600 feet west of the proposed project site. Although the proposed project would not directly impact Proposed Linkage 2, it could generate edge effects, as discussed below. However, in general edge effects on wildlife movement from noise and human activity are expected to be limited due to the proposed project site's distance (i.e., 600 feet) from Proposed Linkage 2.

Drainage

Proposed developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant

⁴ The burrowing owl survey boundary overlaps a portion of APNs 378-030-029 and 378-030-031; however, the survey area does not extend into this area.

materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

The nearest flood-control channel occurs less than 200 feet southwest of the survey area; Alberhill Creek is approximately 600 feet west of the survey area. Stormwater runoff from construction and operation of the proposed project have the potential to adversely affect water quality in offsite drainages. Measures to protect water quality are included below to minimize adverse effects on water quality.

Toxics

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, Habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented.

Petroleum products will be present on the proposed project site during construction and operation and could adversely affect the adjacent habitat. Measures are included to minimize the effects runoff of toxics into adjacent habitat areas.

Lighting

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

Development of the proposed project would include new lighting that may adversely affect wildlife species in adjacent open space. Measures to direct lighting away from adjacent open space are included to minimize these effects.

Noise

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

While the proposed project would create an incremental increase, noise levels are not expected to increase substantially over existing conditions considering the ambient noise from the existing development and roads adjacent to the proposed project site and the distance to Proposed Linkage 2 (600 feet). Therefore, no measures would be required.

Invasives

When approving landscape plans for Development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species (see MSHCP Table 6-2) and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the

planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography and other features.

Ornamental landscaping associated with the proposed project may introduce new invasive species to the surrounding open space. Invasive species have the potential to spread into the surrounding natural open space and displace native species, hybridize with native species (thereby impacting the genetic integrity of the native species), alter biological communities, or alter ecosystem processes. This could degrade the quality of the adjacent vegetation, including vegetation communities that provide suitable habitat for Threatened or Endangered species. Measures are included for the landscaping plan to be reviewed to avoid this potential impact.

Construction equipment can also introduce non-native weed seeds to adjacent areas if equipment is not properly cleaned. While the survey area is already dominated by non-native, weedy species (i.e., grayish shortpod mustard and London rocket), these species are considered to have moderate and limited invasive impacts, respectively, by the California Invasive Plant Council (Cal-IPC).⁵ Adjacent habitat could be further degraded by the use of highly invasive species (e.g., artichoke thistle [*Cynara cardunculus*]). Measures are included for vehicle washing BMPs.

Barriers

Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.

New land development may lead to unauthorized public access, domestic animal predation, and/or illegal trespass or dumping that may negatively affect the MSHCP Conservation Area. While the proposed project would incrementally increase human activity (i.e., a gas station, convenience store, and restaurant), this increase is not expected to be a substantial increase over current conditions with existing development adjacent to the proposed project site. However, measures are recommended to include landscaping or fencing to discourage public access to adjacent areas.

Grading/Land Development

Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.

Grading for the proposed project would be limited to the boundaries of the proposed project site. It would not affect Proposed Linkage 2 along Alberhill Creek. Therefore, no measures would be required.

Nesting Raptors

Trees in the survey area and immediate vicinity have potential to be used for nesting by raptors such as the American kestrel (*Falco sparverius*). Regulations prohibit activities that “take, possess

⁵ Species with a high rating have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Species with a moderate rating have substantial and apparent, but generally not severe, ecological impacts. Species with a limited rating are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score (Cal-IPC 2018)

or destroy” any raptor nest or egg (*California Fish and Game Code* §§3503, 3503.5, and 3513). Additionally, the noise and disturbance associated with construction may disturb a nesting raptor if present immediately adjacent to the proposed project impact area. If construction would be initiated during the raptor nesting season (generally between February 1 and June 30), a pre-construction survey would be required to ensure that no raptor nests are impacted. If an active nest is present, construction may be temporarily restricted in the immediate vicinity of the nest until raptor nesting is complete.

Migratory Bird Treaty Act

The survey area has potential to be used by nesting birds, which are protected by the Migratory Bird Treaty Act (MBTA). Birds have potential to nest in any of the survey area’s vegetation, bare ground, and also on adjacent structures. The MBTA prohibits activities that result in the direct take (defined as the killing or possession) of a migratory bird. If construction would be initiated during the peak bird nesting season (March 1 to June 30, as defined by Section 7.5.3 of the MSHCP), a pre-construction survey would be required to ensure that no nests are impacted. If an active nest is present, construction may be restricted in the immediate vicinity of the nest.

Construction Minimization Measures

Section 7.5.3 of the MSHCP contains a list of standard measures to minimize direct and indirect impacts on biological resources within and adjacent to project sites. These measures are related to protecting water quality, controlling dust, minimizing the spread of invasive plant species, minimizing fire hazards, and other measures. These measures also include requirements to mark project limits through staking/flagging and for a Biological Monitor to be present during vegetation clearing.

MSHCP CONSISTENCY

The proposed project would not directly impact Proposed Linkage 2, wetland habitat associated with Collier Marsh, or habitat of key plant and wildlife populations associated with this proposed linkage (i.e., San Diego ambrosia, least Bell’s vireo, yellow warbler, yellow-breasted chat, downy woodpecker, and southwestern willow flycatcher). Indirect impacts would be avoided/minimized by implementing the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the MSHCP.

The proposed project would not conflict with the conservation goals of Cell 4266. Conservation in the cell ranges from 30 to 40 percent of the cell, focusing on the western portion of the cell. The proposed project will impact 2.67 acres of the Criteria Cell along the its eastern boundary, which represents approximately 1.7 percent of the 158-acre cell (0.17 acre of the survey area is not located within a Criteria Cell). Thus, the proposed project would impact the portion of Cell 4266 outside of the area that is targeted for conservation.

Regarding the Biological Issues and Considerations for Subunit 3 (Elsinore):

- Wetlands including Temescal Wash, Collier Marsh, Alberhill Creek, Lake Elsinore and the floodplain east of Lake Elsinore (including marsh Habitats) would not be impacted by the proposed project. Implementation of the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the MSHCP will maintain water quality of nearby wetlands (Collier Marsh and Alberhill Creek).
- Clay soils supporting Munz’s onion are not present in the survey area.
- Travers-Willow-Domino soil series are not present in the survey area.

- Potential foraging habitat for raptors would be impacted, but the proposed project would not impact sage scrub-grassland ecotone habitat. The loss of 2.84 acres of raptor foraging habitat is not expected to substantially decrease the amount of raptor foraging habitat in the region.
- Habitat for mountain plover in the survey area is considered marginally suitable and there are no recent occurrences known from the vicinity (most are east of Perris).
- Northern harrier is not expected to breed in the survey area.
- Given the surrounding urban development, the survey area does not provide a linkage area for bobcat, although bobcat is expected to use Proposed Linkage 2 located 600 feet west of the survey area.
- The survey area is not in an area requiring focused surveys for San Diego ambrosia per Section 6.1.3 of the MSHCP. The population at Alberhill and Nichols Road would not be impacted by the proposed project.
- Core and Linkage habitat for western pond turtle is not present in the survey area.
- A Core Area for Riverside fairy shrimp is not present in the survey area.
- Core and Linkage habitat for Quino checkerspot butterfly is not present in the survey area.

RECOMMENDATIONS

The following is a list of recommendations to ensure that the proposed project is consistent with the MSHCP and other regulations protecting biological resources.

1. Drainage: A. A Storm Water Pollution Prevention Plan will be prepared and followed.
B. Measures in the Project Specific Water Quality Management Plan (Rahman 2017) will be followed.
 - Drainage flows will be captured by the proposed ribbon gutters toward the proposed BMPs. Permeable pavements are incorporated into the Project design. These surfaces reduce the volume and peak of stormwater runoff and mitigate pollutants from stormwater runoff.
 - Washwater containing any cleaning agent or degreaser and discharge will be collected to the sanitary sewer and not to a storm drain.
 - Storm drain inlets will be marked "only rain down the storm drain". Stormwater pollution prevention information will be provided to new site owners, lessees, or operators. A Lease agreement will include the following: "tenant shall not allow anyone to discharge anything to storm drains or store or deposit materials so as to create a potential discharge to storm drains".
2. Toxics: Guidelines in Lake Elsinore Municipal Code Section 17.112.090 pertaining to gasoline dispensing establishments will be followed. This includes a minimum 30-foot setback of gasoline pumps and pump islands from any property line.
3. Lighting: Lighting features will be incorporated in the project design that comply with Lake Elsinore Municipal Code Section 17.112.040 Lighting (for Nonresidential Development). This includes orienting and shielding all outdoor lighting fixtures in excess of 60 watts to prevent glare or direct illumination on adjacent properties.

4. Invasives:

- A. The Landscaping Plan will be reviewed by a qualified Biologist to ensure that invasive species are not included in the plant palette. If possible, the Landscape Plan should use low water-using plants to be consistent with Assembly Bill 1881.
 - B. Weed seeds entering the construction area via vehicles will be minimized by requiring construction vehicles to be washed prior to delivery to the project site. Track-clean or other methods of vehicle cleaning will be used by the construction contractor to prevent weed seeds from entering/exiting the project site on vehicles.
 - C. Wattles used for erosion control will be certified as weed-free.
5. Barriers: Landscaping and/or fencing should be used to discourage public access and illegal dumping in adjacent habitat areas.
6. Vegetation removal should be planned to occur outside the peak nesting season for raptors (February 1 to June 30) and the peak nesting season for birds (March 1 to June 30). If vegetation removal would occur between February 1 and June 30, a pre-construction survey for active raptor/bird nests would be required. Restrictions may be placed on construction activities in the vicinity of any active nest until the nest is no longer active, as determined by a qualified Biologist.
7. Construction Minimization Measures in Section 7.5.3 of the MSHCP should be followed during construction (see Appendix A).

REFERENCES

- American Ornithologists' Union (AOU). 2015 (July). *Check-list of North American Birds* (7th ed., as revised through 56th Supplement). Washington, D.C.: AOU. <http://www.aou.org/checklist/north/index.php>.
- Baldwin, B.G., D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (Eds.). 2012. *The Jepson Manual: Vascular Plants of California* (Second ed.). Berkeley, CA: University of California Press.
- California Department of Fish and Wildlife (CDFW). 2017a. California Natural Diversity Database. Records of Occurrence for the USGS Alberhill and Elsinore 7.5-minute quadrangles. Sacramento, CA: CDFW, Natural Heritage Division.
- . 2017b (April). *Special Animals*. Sacramento, CA: CDFW, Natural Heritage Division.
- . 2017c (April). *Special Vascular Plants, Bryophytes, and Lichens List*. Sacramento, CA: CDFW, Natural Heritage Division.
- California Invasive Plant Council (Cal-IPC). 2018 (April 12, date accessed). The Cal-IPC Inventory Explanation of Cal-IPC Ratings. Berkeley, CA: Cal-IPC. <http://www.cal-ipc.org/plants/inventory/>.
- California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-03). Records of Occurrence for USGS Alberhill and Elsinore 7.5-minute quadrangles. Sacramento, CA: CNPS. <http://www.rareplants.cnps.org/>.
- Collins, J.T. and T.W. Taggart. 2009. *Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles and Crocodilians* (6th ed.). Lawrence, KS: Center for North American Herpetology.
- Dudek and Associates, Inc. (Dudek). 2003. Western Riverside County Multiple Species Habitat Conservation Plan (Prepared for the Riverside County Integrated Project). Encinitas, CA: Dudek. <http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/>.
- Hickman, J.C., Ed. 1993. *The Jepson Manual of Higher Plants of California*. Berkeley, CA: University of California Press.
- Jepson Flora Project. 2015 (December 18, Revision 3). Jepson eFlora (Records for common species discussed in this report). Berkeley, CA: The Jepson Herbarium. <http://ucjeps.berkeley.edu/eflora/>.
- Knopf, F.L., and M.B. Wunder. 2006. Mountain Plover (*Charadrius montanus*). *The Birds of North America*, No. 211 (A. Poole, Ed.). Philadelphia, PA: The Academy of Natural Sciences.
- Munz, P.A. 1974. *A Flora of Southern California*. Berkeley, CA: University of California Press.
- Rahman Engineering Services (Rahman). 2017 (July 15). Project Specific Water Quality Management Plan. Chino, CA: Rahman.
- Smithsonian National Museum of Natural History (SNMNH). 2011. Mammal Species of the World (3rd ed.) (a database based on Wilson, D.E., and D. M. Reeder's 2005 publication entitled *Mammal Species of the World, A Taxonomic and Geographic Reference*, 3rd ed.).

Washington, D.C.: SNMNH. <https://www.departments.bucknell.edu/biology/resources/msw3/>.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2017. State Soil Data Access (SDA) Hydric Soils List – California. Washington, D.C.: USDA, NRCS. <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>.

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APPENDIX A
CONSTRUCTION MINIMIZATION MEASURES

- Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the County of Riverside and participating jurisdiction prior to construction.
- Timing of construction activities will consider seasonal requirements for breeding birds and migratory non-resident species. Habitat clearing will be avoided during species active breeding season defined as March 1 to June 30.
- Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
- Short-term stream diversions will be accomplished by use of sand bags or other methods that will result in minimal in-stream impacts. Short-term diversions will consider effects on wildlife.
- Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
- Settling ponds where sediment is collected will be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds will be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care will be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
- No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
- The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling and staging areas will be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.
- The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.
- During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint will be avoided.
- Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
- Training of construction personnel will be provided.
- Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices.
- When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to coastal sage scrub or chaparral vegetation, appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire

hazards, preventative actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities.

- Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
- Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.