

Appendix B

Biological Resources Assessment

July 6, 2023

JN 194911

Mr. Abe Tress
New Gen Healthcare
9528 West Pico Boulevard
Los Angeles, CA 90035

SUBJECT: Results of a Biological Resources Assessment for the Proposed Shandin Hills Mental Health Rehabilitation Center, San Bernardino County, California

Dear Mr. Tress:

Michael Baker International (Michael Baker) has prepared this report to document the results of a biological resources assessment for the proposed Shandin Hills Mental Health Rehabilitation Center (project site or project) located in San Bernardino County, California. Michael Baker conducted a thorough literature review and a field survey to confirm existing site conditions and assess the potential for special-status plant and wildlife species¹ that have been documented or that are likely to occur on or within the immediate vicinity of the project site. Specifically, this report provides a detailed assessment of the suitability of the on-site habitat to support special-status plant and wildlife species that were identified in the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CNDDDB; CDFW 2023a), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2023), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation Project Planning Tool (IPaC; USFWS 2023a), and other databases as potentially occurring in the vicinity of the project site.

Project Location

The project site is generally located north of State Route 210 (SR-210), west of SR-18, south of the San Bernardino Mountains, and east of Interstate 215 (I-215) in San Bernardino County, California (refer to Figure 1, *Regional and Project Vicinity*, in Attachment A). The project site is depicted in an un-sectioned area of Township 1 North, Range 4 West, on the U.S. Geological Survey's (USGS) *San Bernardino North, California* 7.5-minute quadrangle. Specifically, the project site is located at 4164 North 4th Avenue, San Bernardino County, California on Assessor's Parcel Numbers 026514112, 026514124, and 026514115 (refer to Figure 2, *Project Site*).

¹ As used in this report, "special-status" refers to plant and wildlife species that are federally-/State-listed, proposed, or candidates; plant species that have been designated a California Rare Plant Rank species by the California Native Plant Society; wildlife species that are designated by the California Department of Fish and Wildlife as Fully Protected, Species of Special Concern, or Watch List species; State/locally rare vegetation communities; and species that warrant protection under local or regional preservation policies.

Project Description

The project proposes the construction and operation of a new, approximately 71,713 square-foot, 197-bed, single-story mental health rehabilitation building on the northwest portion of the approximately 5.93-acre (258,386 square feet) property. The capacity would help meet the State's growing demand for mental health services offered to individuals with serious mental illness that often co-occur with substance use disorders and homelessness. The project would also help alleviate bed capacity at acute/psych hospitals, emergency rooms, and the justice system that are currently operating beyond capacity.

The new building would include patient facilities, five internal courtyard areas, an ambulance pickup area, staff resources, and an emergency backup generator. Additional proposed activities include demolition of an existing building and adjacent landscaping, removal of existing shed and storage areas, and construction and installation of site fencing, parking, a perimeter and internal access road system, and landscaping.

Methodology

Literature Review

Michael Baker conducted thorough literature reviews and records searches to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. Previous special-status plant and wildlife species occurrence records within the USGS *San Bernardino North, California* 7.5-minute quadrangle were determined by a query of the CNDDDB (CDFW 2023a) and CIRP (CNPS 2023), and for the project region by IPaC (USFWS 2023a).

Current conservation statuses of species were verified through lists and resources provided by the CDFW, specifically the *Special Animals List* (CDFW 2023b), *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023c), *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2023d), and *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (CDFW 2023e). In addition, Michael Baker reviewed previously prepared reports, survey results, and literature, as available, detailing the biological resources previously observed on or within the vicinity of the project site to gain an understanding of existing site conditions, confirm previous species observations, and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status species, as well as the following resources:

- Google Earth Pro Historical Aerial Imagery from 1994 to 2021 (Google Inc. 2022)
- Species Accounts provided by Birds of the World (Billerman et. al 2020)
- *Custom Soil Resource Report for San Bernardino County, California, Southwestern Part*, (U.S. Department of Agriculture [USDA] 2023)
- USFWS Critical Habitat Mapper and Environmental Conservation Online System (USFWS 2023b)

Habitat Assessment/Field Survey

Michael Baker biologist Ryan Winkleman conducted a habitat assessment/field survey on May 16, 2023, to confirm existing site conditions within the project site. Michael Baker's biologist surveyed the entire project site. A surrounding buffer was not surveyed as part of this effort due to the close proximity of

adjacent privately-owned properties and the fully developed suburban nature of the Project vicinity. Refer to Table 1 below for a summary of the survey date, timing, surveyor, and weather conditions.

Table 1: Survey Date, Time, Surveyor, and Weather Conditions

Date	Time (start / finish)	Surveyors	Weather Conditions	
			Temperature (°F) (start / finish)	Wind Speed (mph) (start / finish)
May 17, 2023	1015 / 1120	Ryan Winkleman	86 partly cloudy / 82 partly cloudy	0 – 3

Vegetation communities occurring within the project site were identified during the field investigation, mapped on aerial imagery, and classified in accordance with the vegetation descriptions provided in *A Manual of California Vegetation* (Sawyer et al. 2009). The communities were also cross referenced with the *California Sensitive Natural Communities List* (CDFW 2022) to determine which communities may qualify as special-status under CDFW’s current mapping, and the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) for the purposes of evaluating the presence or absence of special-status vegetation communities identified in the CNDDB records search, which still uses the now-outdated Holland vegetation classification system. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site vegetation communities, and the any presence of potentially regulated jurisdictional features (e.g., streams, flood control channels) were noted within the project site. Michael Baker used Geographic Information Systems (GIS) ArcView software to digitize the mapped vegetation communities and then transferred the data onto an aerial image to further document existing conditions and quantify the acreage of each vegetation community. All plant and wildlife species observed/detected, as well as dominant plant species within each vegetation community, were recorded. Plant species observed during the field survey were identified by visual characteristics and morphology in the field, while unusual and less familiar plant species were photographed and identified later using taxonomic guides. Plant nomenclature used in this report follows Jepson eFlora (Jepson Flora Project 2023) and scientific names are provided immediately following common names of plant species (first reference only).

Wildlife species were identified by sight, calls, tracks, scat, or other types of evidence. Field guides used to assist with identification of wildlife species during the habitat assessment included *The Sibley Guide to Birds* (Sibley 2014), *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003), *Bats of the United States and Canada* (Harvey et al. 2011), and *A Field Guide to Mammals of North America* (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Society’s *Checklist of North American Birds* (Chesser et al. 2022), nomenclature of amphibians and reptiles follows *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (Crother 2017), and nomenclature for mammals follows the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

Existing Site Conditions

The project site is flat with an approximate elevation range of 1,305 to 1,290 feet above mean sea level, sloping slightly downwards to the west. According to the *Custom Soil Resource Report for San Bernardino County Southwestern Part, California* (USDA 2023), the project site is underlain by two soil units, Tujunga loamy sand, 0 to 5 percent slopes (TuB) and Tujunga gravelly loamy sand, 0 to 9 percent slopes (TvC) (refer to Figure 3, *USDA Soils*, in Attachment A). Based on a review of historic aerial imagery (HistoricAerials.com 2023), the facility was built between 1938 and 1959 and with the exception of early expansions, the facility has remained largely unchanged, including the presence of a large open field to the north of the fenced center. Refer to Attachment B for representative photographs of the project site taken during the field survey.

Vegetation Communities and Land Cover Types

There were no natural vegetation communities observed within the boundaries of the project site during the field survey. Instead, 3.02 acres of disturbed habitat and 2.87 acres of developed areas were observed and mapped within the project site. These land cover types are depicted on Figure 4, *Vegetation Communities and Other Land Uses*, in Attachment A). Refer to Attachment C for a complete list of plant species observed within the project site during the field survey.

Disturbed Habitat

Disturbed habitat comprises about half of the project property. These areas have been physically disturbed by anthropogenic activities, particularly routine weed abatement activities (i.e., disking, tilling), and although they no longer support a native vegetation community, they maintain a soil substrate. Surface soils within these areas are heavily disturbed, eroded, and compacted. Vegetation that is present primarily consists of ruderal/weedy native and non-native plant species including contorted primrose (*Camissonia strigulosa*), doveweed (*Croton setiger*), pineapple weed (*Matricaria discoidea*), lamb's quarters (*Chenopodium album*), red-stemmed filaree (*Erodium cicutarium*), puncturevine (*Tribulus terrestris*), and Crete weed (*Hedypnois cretica*).

Developed

Developed areas consist of the existing facility, which is fenced within the larger project site. This area consists primarily of buildings and common areas. There is minimal landscaping within the facility, with grassy lawns and Mexican fan palms (*Washingtonia robusta*) being the most prominent types of ornamental vegetation present.

Wildlife

Natural vegetation communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a general discussion of common wildlife species that have been detected on-site by Michael Baker or that are expected to occur based on existing site conditions. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the work was conducted. Refer to Attachment C for a complete list of wildlife species observed within the project site during the field survey.

Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the project site during the field survey. Therefore, no fish are expected to occur.

Amphibians

No amphibians or hydrogeomorphic features that would provide suitable breeding habitat for amphibians were observed within the project site during the field survey. Therefore, no amphibians are expected to occur.

Reptiles

One reptile species was observed in the project site during the field survey: western side-blotched lizard (*Uta stansburiana elegans*). The project site is expected to provide habitat for a limited number of reptilian species that are acclimated to edge or urban environments. Other common reptilian species that may be present within the project site include western fence lizard (*Sceloporus occidentalis*) and woodland alligator lizard (*Elgaria multicarinata webbia*).

Birds

The project site provides marginal foraging and nesting habitat for a limited number of resident and migrant bird species that are adapted to a high degree of disturbance associated with the surrounding residential land uses. A total of eleven (11) bird species were detected during the field survey. Some of the more commonly detected bird species included American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), and house sparrow (*Passer domesticus*). Please refer to Attachment C for a complete list of bird species observed during the field survey.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGF)². To maintain compliance with the MBTA and CFGF, clearance surveys are typically required prior to any ground disturbance or vegetation removal activities to avoid direct or indirect impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts (e.g., nest abandonment, loss of reproductive effort) to nesting birds, it is considered “take” and is potentially punishable by fines and/or imprisonment. The project site provides limited nesting habitat for most year-round and seasonal avian residents other than those that nest on the open ground (e.g., killdeer [*Charadrius vociferus*]). However, no active nests or birds displaying overt nesting behavior were observed during the field survey.

Mammals

The project site provides marginal habitat for a limited number of mammalian species adapted to living in edge or urban environments. However, routine weed abatement and surrounding residential and commercial development limits the potential for mammalian species to occur. No mammal species were observed within

² Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the California Fish and Game Code or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act, as amended (16 U.S.C. § 703 *et seq.*).

the project site during the field survey. Common mammalian species that may occur within the project site include opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and California ground squirrel (*Otospermophilus beecheyi*). Bats occur throughout most of southern California; however, the project site does not provide roosting habitat for bats (e.g., within hollow tree trunks/limbs, underneath tree foliage). Roosting habitat for bats may be present in the surrounding area, particularly where untrimmed Mexican fan palms (*Washingtonia robusta*) or other large trees occur with either broad leaves that bats can cling to, crevices or cavities that bats can roost in, and/or bark that can be pushed under for roosting. Western yellow bats (*Lasiurus xanthinus*; a State Species of Special Concern [SSC]) in particular are known to favor Mexican fan palms for roosting sites, where they can cling to the underside of untrimmed palm fronds. All Mexican fan palms within the project site are trimmed and do not provide suitable bat roosting habitat.

Migratory Corridors and Linkages

Wildlife corridors and linkages are key features for wildlife movement between habitat patches that may provide suitable cover, foraging, and breeding habitat for wildlife. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land. There are no wildlife corridors or linkages within the project site because it is surrounded by development on all sides and has no connectivity to natural communities.

State and Federal Jurisdictional Resources

There are three agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates discharge of dredged or fill material into “waters of the U.S.” pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Water Quality Control Board (RWQCB) regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the California Porter-Cologne Water Quality Control Act, and the CDFW regulates alterations to streambed and associated vegetation communities under Section 1600 *et seq.* of the CFGC.

No jurisdictional drainages or potential wetland features were observed within the boundaries of the project site. Therefore, development of the project will not result in impacts to State or federal jurisdictional areas or require regulatory approvals/permits from the USACE, RWQCB, or CDFW.

Special-Status Biological Resources

The CNDDB (CDFW 2023a), CIRP (CNPS 2023), and IPaC (USFWS 2023a) were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities known from the project area. The field survey was conducted to assess the conditions of the habitat(s) within the boundaries of the project site to determine if the existing vegetation communities, at the time of the field survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. Additionally, the potentials for special-status species to occur within the project site were determined based on the reported occurrence locations in the CNDDB and CIRP and the following criteria:

- **Present:** the species was observed or detected within the project site during the field survey.

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- **High:** Occurrence records (within 20 years) indicate that the species has been known to occur on or within 1 mile of the project site and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the project site and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
 - **Moderate:** Occurrence records (within 20 years) indicate that the species has been known to occur within 1 mile of the project site and the project site is within the normal expected range of this species. There is suitable habitat within the project site, but the site is ecologically isolated from any local known extant populations or sightings.
 - **Low:** Occurrence records (within 20 years) indicate that the species has been known to occur within 5 miles of the project site, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the project site.
 - **Not Expected:** There are no occurrence records of the species occurring within 5 miles of the project site, there is no suitable habitat within the project site, and/or the project site is outside of the normal expected range for the species.

The CNDDDB, CIRP, and IPaC identified twenty-eight (28) special-status plant species and twenty-six (26) special-status wildlife species as occurring within the USGS *San Bernardino North, California* 7.5-minute quadrangle. In addition, two (2) special-status vegetation communities were identified. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on specific habitat requirements, availability/quality of suitable habitat, and known distributions of species/populations. Special-status biological resources identified during the literature review as having the potential to occur within the vicinity of the project site are presented in *Table D-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment D.

Special-Status Plants

A total of twenty-eight (28) special-status plant species were identified during reviews of the CNDDDB, CIRP, and IPaC (refer to Attachment D). There were no special-status plants identified in the project site during the field survey. Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, Michael Baker determined that all of the special-status plant species identified by the CNDDDB, CIRP, and IPaC either are not expected to occur within the project site.

Special-Status Wildlife

A total of twenty-six (26) special-status wildlife species were identified during reviews of the CNDDDB and IPaC (refer to Attachment D). Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, Michael Baker determined that all of the special-status wildlife species identified by the CNDDDB and IPaC either have a low potential or are not expected to occur within the project site.

As previously discussed, the project site does not provide roosting habitat for bats (e.g., within hollow tree trunks/limbs, underneath tree foliage). However, roosting habitat may be present in the surrounding area, particularly where there are untrimmed Mexican fan palms or other large trees with either broad leaves that bats can cling to, crevices or cavities that bats can roost in, and/or bark that can be pushed under to roost underneath.

Special-Status Vegetation Communities

Two (2) special-status vegetation communities have been reported in the USGS *San Bernardino North, California* 7.5-minute quadrangles by the CNDDDB: Riversidian Alluvial Fan Sage Scrub and Southern Sycamore Alder Riparian Woodland. These special-status vegetation communities were not observed during the field survey, and no other special-status vegetation communities, including those identified by CDFW on the California Sensitive Natural Communities list (CDFW 2023f), were observed.

Critical Habitat

Under the definition used by the federal Endangered Species Act (FESA), designated “Critical Habitat” refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated Critical Habitat if they contain one or more of the physical or biological features that are essential to that species’ conservation and if the other areas that are occupied are inadequate to ensure the species’ recovery. If a project may result in take or adverse modification to a species’ designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus may include projects that occur on federal lands, require federal permits (e.g., CWA Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA. The project site is not located within designated Critical Habitat for any federally listed species (refer to Figure 5, *Critical Habitat*).

Local Policies and Ordinances

Tree Maintenance

San Bernardino County is responsible for maintaining trees located between sidewalks and curbs on public property. However, on private property, the property owner is responsible for maintaining trees. The County requires a free tree permit for all cutting, replacing, and/or removing trees within any portion of a San Bernardino County Department of Public Works (Public Works) maintained right-of-way. The project is located on private property and not within a right-of-way maintained by Public Works. Therefore this ordinance does not apply to the project and a permit for any tree removals proposed under the project will not be required.

Impact Analysis

The following section describes project-related impacts and their significance according to current analysis guidelines and thresholds for Biological Resources under the California Environmental Quality Act (CEQA). The CEQA analysis for Biological Resources includes a series of six (6) questions to determine if the project would have a significant impact on Biological Resources. These questions include the following:

- a) *Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

Less than significant with mitigation incorporated. The project site is mapped as disturbed and developed land use types. On-site vegetation within the project site does not provide suitable habitat for special-status species and the project site is not expected to support special-status plant or animal species. Therefore, the project would have no impact on candidate, sensitive, or special-status species. However, the on-site vegetation could provide very marginal nesting habitat for a narrow variety of birds protected by the MBTA or CFGC, including those that nest in shrubs, trees, and directly on the ground. If construction occurs between January 1st and August 31st, there could be adverse effects to nesting birds on-site or in the immediate vicinity. Construction-related disturbance could result in nest abandonment, premature fledging of nestlings, or even direct take if an active nest is present in a construction area. With implementation of Measure **BIO-1**, impacts to nesting birds would be less than significant.

BIO-1: If project-related activities are to be initiated during the nesting season (January 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three (3) days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a “no-disturbance” buffer shall be established around the active nest. The size of the “no-disturbance” buffer shall be increased or decreased based on the judgment of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the “no-disturbance” buffer disturb the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

b) Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

No impact. Based on Michael Baker’s evaluation of the project site, there are no riparian habitats or other sensitive natural communities present within the site boundaries. Therefore, the project would have no impact on riparian habitats or other sensitive natural communities.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No impact. The project site does not contain any state or federally protected wetlands or any areas potentially falling under the jurisdiction of regulatory agencies. Therefore, there would be no impact to state or federally protected wetlands.

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- d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No impact. The project site is surrounded on all sides by existing development and has no direct connectivity to any natural occurring habitat areas or wildlife corridors. Expansion of the existing site would have no impact on wildlife movement or wildlife corridors because the current project site does not function in either capacity. There are no native wildlife nurseries within the project site or in the immediate surrounding area. Therefore, the project would have no impact on native wildlife movement, migratory wildlife corridors, or native wildlife nursery sites.

- e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The only trees within the project site that may be affected by construction are landscape trees that are generally all located either within the existing secure facility or along its perimeter. None of these trees are protected by a local tree preservation policy, and there are no other local policies that pertain to on-site biological resources. Therefore, the project will have no impact on local policies or ordinances protecting biological resources.

- f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The project site is not located within any approved local, regional, or state habitat conservation plans, and therefore the project would have no impact on any adopted conservation plans.

Conclusions and Recommendations

Approximately 3.02 acres of disturbed habitat and 2.87 acres of developed areas were observed and mapped within the boundaries of the project site during the field survey, with no natural or sensitive vegetation communities found on-site.

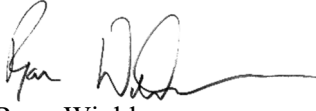
No special-status plant species were observed within the project site during the field survey. Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, Michael Baker determined that all special-status plant species identified by the CNDDDB, CIRP, and IPaC are not expected to occur within the project site.

No special-status wildlife species were observed during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, Michael Baker determined that all special-status wildlife species identified by the CNDDDB and IPaC either have a low potential or are not expected to occur within the project site.

In order to avoid and/or minimize potential impacts to biological resources, it is recommended that Measure **BIO-1** listed in the Impact Analysis above be incorporated. No other measures are expected to be required to reduce impacts to biological resources.

Please do not hesitate to contact me at (949) 533-0918 or ryan.winkleman@mbakerintl.com should you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Winkleman', with a long horizontal flourish extending to the right.

Ryan Winkleman
Senior Biologist

Attachments:

- A. Project Figures*
- B. Site Photographs*
- C. Plant and Wildlife Species Observed List*
- D. Potentially Occurring Special-Status Biological Resources*
- E. References*

Attachment A

Project Figures

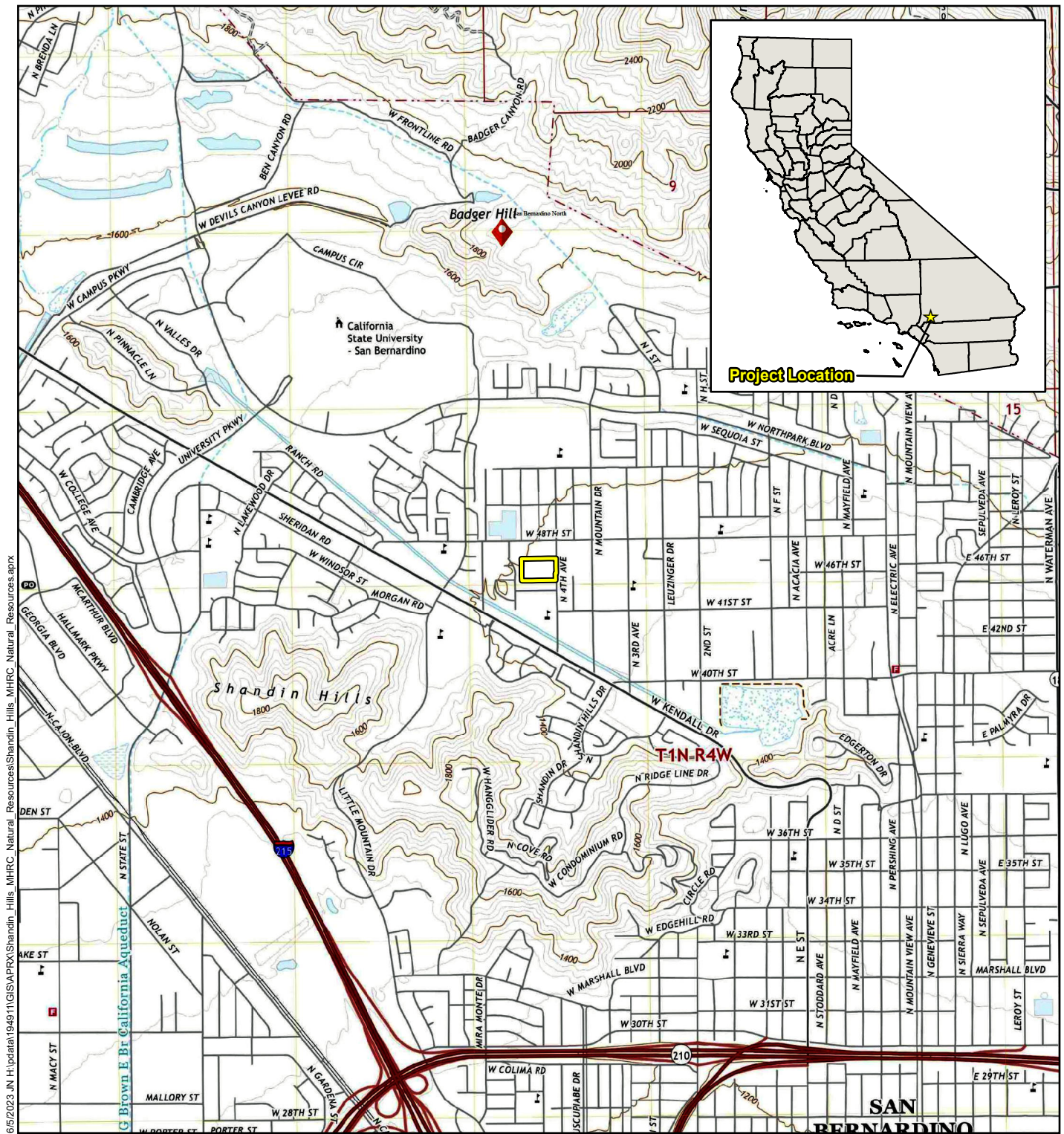
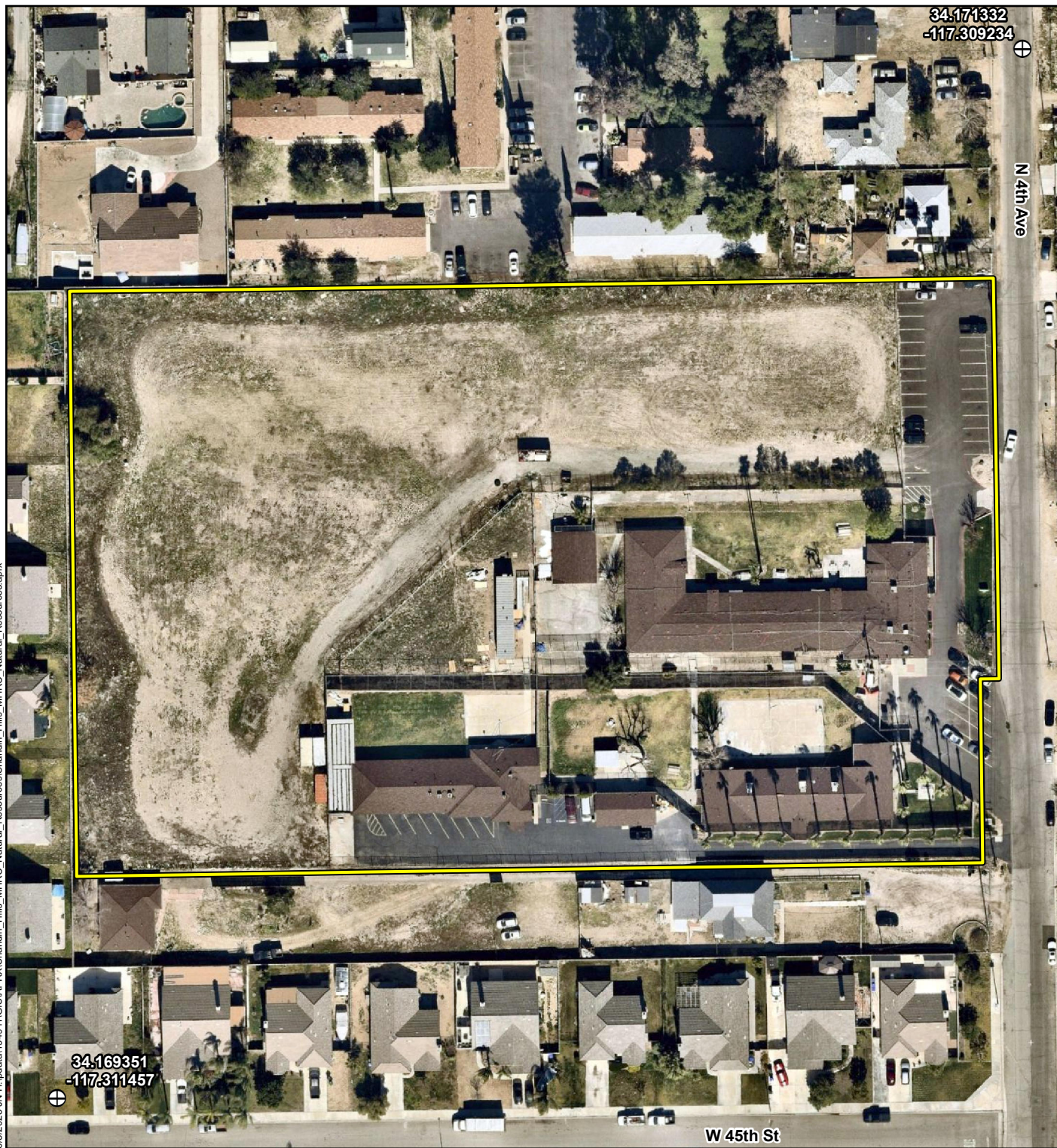


Figure 1

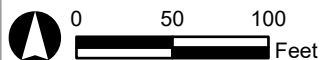
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Legend

-  Project Site (5.89 acres)
-  Reference Point

Michael Baker
INTERNATIONAL



Source: Nearmap (01/2022)

SHANDIN HILLS MENTAL HEALTH REHABILITATION CENTER EXPANSION PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

Figure 2

6/5/2023 JN H:\pda\194911\GIS\APRX\Shandin_Hills_MHRC_Natural_Resources\Shandin_Hills_MHRC_Natural_Resources.aprx



Legend



Project Site (5.89 acres)



Reference Point

TvC

Tujunga gravelly loamy sand,
0 to 9 percent slopes

TuB

Tujunga loamy sand,
0 to 5 percent slopes

Michael Baker
INTERNATIONAL



0 50 100
Feet

Source: Nearmap (01/2022), USDA (9/2021)

SHANDIN HILLS MENTAL HEALTH REHABILITATION CENTER EXPANSION PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

USDA Soils

Figure 3

6/5/2023 JN H:\pda\194911\GIS\APRX\Shandin_Hills_MHRC_Natural_Resources\Shandin_Hills_MHRC_Natural_Resources.aprx



Legend



Project Site (5.89 acres)



Disturbed (3.02 acres)



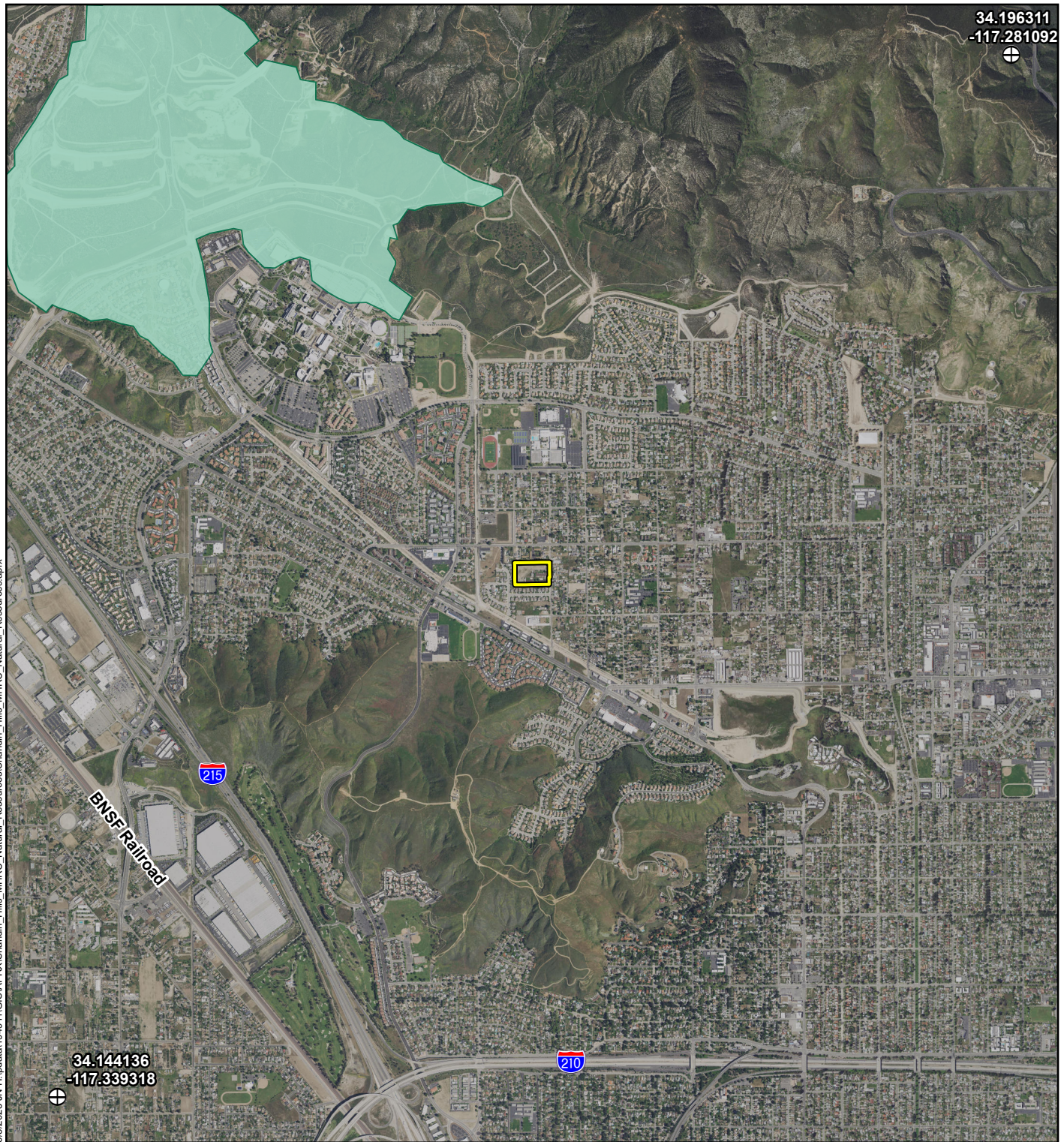
Reference Point



Developed (2.87 acres)



6/5/2023 JN H:\pdaia\194911\GIS\APRX\Shandin_Hills_MHRC_Natural_Resources\Shandin_Hills_MHRC_Natural_Resources.aprx



Legend



Project Site (5.89 acres)



San Bernardino Merriam's Kangaroo Rat
(*Dipodomys merriami parvus*)



Reference Point



Attachment B

Site Photographs



Photograph 1: West-facing view from the parking lot of the open space area on the north side of the project site to be built out with new facilities.



Photograph 2: South-facing view of the existing Shandin Hills Behavioral Health Center. These buildings are not part of the proposed construction.



Photograph 3: East-facing view from the northwest corner of the open space proposed for development along the northern section of the project site.



Photograph 4: South-facing view from the northwest corner of open space proposed for development on the western side of the project site.



Photograph 5: Northeast-facing view from the southwest corner of the project site at open space proposed for development.



Photograph 6: Administrative buildings and offices located along the southeastern boundary of the project site. These buildings are proposed to be removed and replaced.



Photograph 7: South-facing view into the existing Shandin Hills Behavioral Health Center. For the biological field survey it was not necessary to go inside the interior, fenced facility.

Attachment C

Plant and Wildlife Species Observed List

Table C-1: Plant and Wildlife Species Observed List

Scientific Name*	Common Name	Cal-IPC Rating**	Special-Status Rank
Plants			
<i>Acer</i> sp.	maple		
<i>Achyraea mollis</i>	blow wives		
<i>Agave</i> sp.*	century plant		
<i>Agoseris</i> sp.	dandelion		
<i>Ailanthus altissima</i>	tree of heaven	Moderate	
<i>Ambrosia psilostachya</i>	western ragweed		
<i>Anagallis arvensis</i> *	scarlet pimpernel		
<i>Arundo donax</i> *	giant reed	High	
<i>Bromus diandrus</i> *	ripgut brome	Moderate	
<i>Bromus rubens</i> *	red brome	High	
<i>Callistemon citrinus</i> *	crimson bottlebrush		
<i>Camissonia strigulosa</i>	contorted primrose		
<i>Chenopodium album</i> *	lamb's quarters		
<i>Croton setiger</i>	doveweed		
<i>Erigeron canadensis</i>	horseweed		
<i>Erodium cicutarium</i> *	redstem filaree	Limited	
<i>Hedypnois cretica</i> *	Crete weed		
<i>Helianthus annuus</i>	common sunflower		
<i>Hirschfeldia incana</i> *	shortpod mustard	Moderate	
<i>Hordeum murinum</i> *	hare barley	Moderate	
<i>Lactuca serriola</i> *	prickly lettuce		
<i>Lupinus bicolor</i>	bicolored lupine		
<i>Malva parviflora</i> *	cheeseweed		
<i>Matricaria discoidea</i>	pineapple weed		
<i>Nerium oleander</i> *	oleander		
<i>Rosa</i> sp.	rose		
<i>Salsola tragus</i> *	Russian thistle	Limited	
<i>Schismus</i> sp.*	Mediterranean grass	Limited	
<i>Sisymbrium irio</i> *	London rocket	Limited	
<i>Sonchus asper</i> *	spiny sowthistle		
<i>Tribulus terrestris</i> *	puncturevine	Limited	
<i>Washingtonia robusta</i> *	Mexican fan palm	Moderate	
<i>Yucca schidigera</i>	Mohave yucca		
Birds			
<i>Chondestes grammacus</i>	lark sparrow		
<i>Corvus brachyrhynchos</i>	American crow		
<i>Dryobates nuttallii</i>	Nuttall's woodpecker		
<i>Haemorhous mexicanus</i>	house finch		
<i>Icterus cucullatus</i>	hooded oriole		
<i>Mimus polyglottos</i>	northern mockingbird		

Table C-1: Plant and Wildlife Species Observed List

Scientific Name*	Common Name	Cal-IPC Rating**	Special-Status Rank
<i>Passer domesticus</i> *	house sparrow		
<i>Sayornis nigricans</i>	black phoebe		
<i>Spinus psaltria</i>	lesser goldfinch		
<i>Streptopelia decaocto</i> *	Eurasian collared-dove		
<i>Sturnus vulgaris</i> *	European starling		
Reptiles			
<i>Uta stansburiana elegans</i>	western side-blotched lizard		

* **Non-native species**

** **California Invasive Plant Council (Cal-IPC) Ratings**

High	These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
Moderate	These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
Limited	These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Attachment D

Potentially Occurring Special-Status Biological Resources

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
SPECIAL-STATUS WILDLIFE SPECIES				
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	WL G5T3 S3	Yearlong resident that is typically found between 3,000 and 6,000 feet amsl. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	Not Expected: Suitable habitat consisting of coastal sage scrub and chaparral habitats are not present within the project site.
<i>Anniella stebbinsi</i> southern California legless lizard	SSC G3 S3	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.	No	Not Expected: Suitable habitat consisting of coastal sand dunes, sandy wash and alluvial fans are not present within the project site. Additionally, the project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Arizona elegans occidentalis</i> California glossy snake	SSC G5T2 S2	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	Not Expected: Suitable habitat consisting of scrub, rocky washes and chaparral habitats preferred by this species are not present within the project site. Additionally, the project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	WL G5 S2S3	Uncommon to fairly common over much of its range in Orange, Riverside, and San Diego counties. Also occurs in southwestern San Bernardino County near Colton. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	Not Expected: Suitable habitat consisting of coastal sage scrub and riparian scrub preferred by this species is not present within the project site because the project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	SSC G5T5 S3	This subspecies is found in coastal southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, and north into Ventura County. Ranges south into Baja California. Found in a variety of ecosystems, primarily hot and dry open areas with sparse vegetation in chaparral, woodland, and riparian areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	No	Not Expected: Suitable habitat consisting of coastal sage scrub or chaparral preferred by this species is not present within the project site because the project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Bombus crotchii</i> Crotch bumble bee	SC G2 S2	Found from coastal California east to the Sierra-Cascade crest and south into Mexico. Primarily occurs in California, including the Mediterranean region, Pacific coast, western desert, great valley, and adjacent foothills through most of southwestern California. Has also been recorded in Baja California, Baja California Sur, and in southwest Nevada. Inhabits open grassland and scrub habitats. Primarily nests underground. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	SSC G5T3T4 S3S4	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Habitat types include coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Charina umbratica</i> southern rubber boa	ST G2G3 S2S3	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats, specifically in meadow & seep, riparian forest, riparian woodland, upper montane coniferous forest, and wetlands. Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	No	Not Expected: Suitable habitats consisting of riparian forest, montane coniferous forest, and wetlands preferred by this species is not within the project site. Additionally, the project site is outside of known occurrence ranges.
<i>Danaus plexippus</i> monarch butterfly	FC G4T2T3 S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No	Not Expected: There are no known wintering roosts within or nearby the project site (Xerxes 2023).
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE SC SSC G5T1 S1	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	Not Expected. Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE SE G5T2 S1	Uncommon summer resident in southern California primarily found in lower elevation riparian habitats occurring along streams or in meadows. The structure of suitable breeding habitat typically consists of a dense mid-story and understory and can also include a dense canopy. Nest sites are generally located near surface water or saturated soils. The presence of surface water, swampy conditions, standing or flowing water under the riparian canopy are preferred.	No	Not Expected: Suitable dense riparian habitats with surface water are not present within or adjacent to the project site.
<i>Eremophila alpestris actia</i> California horned lark	WL G5T4Q S4	Yearlong resident of California. This subspecies is typically found in coastal regions. Breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Nests on the open ground.	No	Low (Foraging): The project site provides marginal foraging habitat for this species.
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE G5T1T2 S1S2	Occupies a variety of habitat types that support California plantain (<i>Plantago erecta</i>), the species primary larval host plant, including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub. Can also be found in desert canyons and washes at the lower edge of chaparral habitats.	No	Not Expected: California plantain was not observed within the project site.
<i>Falco columbarius</i> merlin	WL G5 S3S4	Winter resident of southern California. Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds. This species does not breed in California.	No	Low (Foraging): Marginal foraging habitat is present within the project site. However, this species does not nest in California.
<i>Glaucomys oregonensis californicus</i> San Bernardino flying squirrel	SSC G5T1T2 S1S2	Occurs in white fir (<i>Abies concolor</i>) and Jeffrey pine (<i>Pinus jeffreyi</i>) mixed conifer forests with black oak (<i>Quercus kelloggii</i>) components at higher elevations. Use cavities in large trees, snags, and logs for cover. Habitats are typically mature, dense conifer forest in close proximity to riparian areas.	No	Not Expected: The project site does not provide suitable mature, dense conifer forest habitat preferred by this species.
<i>Lasiurus xanthinus</i> western yellow bat	SSC G4G5 S3	Uncommon in California, known only in Los Angeles and San Bernardino Counties. Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Prefers to roost and feed in, and near, palm oases and riparian habitats. Commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non-native palm trees.	No	Not Expected: The project site does not contain any suitable roosting habitat.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	SSC G5T3T4 S3S4	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Woodrats often are associated with cholla cactus which they use for water and dens or boulders and boulder piles. The most common natural habitats for records are chaparral, coastal sage scrub (including RSS and Diegan coastal sage scrub) and grassland.	No	Not Expected: The project site lacks any of the rocky, shrubby habitat that this species and its middens are typically associated with.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	SSC G4 S3	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree woodland, and palm oasis habitats. Prefers rocky desert areas with high cliffs or rock outcrops, which are used as roosting sites. Considered a resident in San Diego County.	No	Not Expected: The project site lacks any foraging or roosting habitat for this species.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	SSC G5T1T2 S1S2	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	Not Expected: Suitable grassland and coastal sage scrub habitats with fine sandy soils are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and/or compacted surface soils.
<i>Phrynosoma blainvillii</i> coast horned lizard	SSC G3G4 S4	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g. fire, floods, unimproved roads, grazing lands, and fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	Not Expected: The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. The site is also surrounded by existing development and is unlikely to get wandering lizards from undeveloped areas.
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT SSC G4G5T2Q S2	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet amsl in coastal regions and below 1,500 feet amsl inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	No	Not Expected: There is no coastal sage scrub on the project site or anywhere in the vicinity.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Rana muscosa</i> southern mountain yellow-legged frog	FE SE WL G1 S1	The species inhabits ponds, lakes, and streams at moderate to high elevations. Usually associated with montane riparian habitats in lodgepole pine, ponderosa pine (<i>Pinus ponderosa</i>), sugar pine (<i>Pinus lambertiana</i>), white fir, whitebark pine (<i>Pinus albicaulis</i>), and wet meadow vegetation types. Occupied alpine lakes usually have margins that are grassy or muddy and inhabit sandy or rocky shores at lower elevations. Streams utilized vary from rocky, high gradient streams with numerous pools, rapids, and small waterfalls to those with marshy edges and sod banks. Species seems to prefer streams of low gradient and slow or moderate flow with very small, shallow streams being less frequently used.	No	Not Expected: There is no suitable habitat for this species within the project site, as this species only occurs in high-elevation montane streams.
<i>Setophaga petechia</i> yellow warbler	SSC G5 S3S4	Present in California from April through September. Nests in riparian areas dominated by willows, cottonwoods, California sycamores, or alders (<i>Alnus</i> spp.) or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	Not Expected: Suitable foraging and nesting habitats preferred by this species including riparian habitat or eucalyptus thickets are not present within the project site.
<i>Spea hammondi</i> western spadefoot	SSC G3 S3	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain American bullfrogs (<i>Lithobates catesbeianus</i>), predatory fish, or crayfish are necessary for breeding. Estivates in upland habitats adjacent to potential breeding sites in burrows approximating 3 feet in depth.	No	Not Expected: Suitable habitat preferred by this species including coastal sage scrub, mulefat scrub, washes, and vernal pools is not present within the project site.
<i>Thamnophis hammondi</i> two-striped gartersnake	SSC G4 S3S4	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet amsl.	No	Not Expected: Suitable habitat preferred by this species, which depends on surface water, is not present within the project site.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE SE SSC G5T2 S2	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	No	Not Expected: Suitable foraging and nesting habitats preferred by this species are not present within the project site.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
SPECIAL-STATUS PLANT SPECIES				
<i>Arenaria paludicola</i> marsh sandwort	FE SE 1B.1 G1 S1	Perennial stoloniferous herb. Found on sandy, openings within marshes and swamps (freshwater or brackish). Found at elevations ranging from 12 to 558 feet amsl. Blooming period is May through August.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to past continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Berberis nevini</i> Nevin's barberry	FE SE 1B.1 G1 S1	Perennial evergreen shrub. Occurs on sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 899 to 2,707 feet amsl. Blooming period is (February) March through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT CE 1B.1 G2 S2	Perennial bulbiferous herb. Occurs in clays within chaparral, cismontane woodland, coastal scrub, Playas Valley and foothill grassland, and vernal pool habitats. Grows in elevations ranging from 80 to 3,675 feet amsl. Blooming period is March through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Calochortus catalinae</i> Catalina mariposa lily	4.2 G3G4 S3S4	Perennial bulbiferous herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Grows in elevations ranging from 50 to 2,295 feet amsl. Blooming period is (February) March through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa-lily	1B.2 G3T2 S2	Perennial bulbiferous herb. Occurs in mesic micro habitats within chaparral, lower montane coniferous forest, and meadows and seep habitats. Grows in elevations ranging from 2330 to 7840 feet amsl. Blooming period is April through July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to past continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Calochortus plummerae</i> Plummer's mariposa-lily	4.2 G4 S4	Perennial bulbiferous herb. Occurs on granitic and rocky soils within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley/foothill grassland. Grows in elevations ranging from 328 through 5,577 feet amsl. Blooming period is May through July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Calochortus simulans</i> La Panza mariposa-lily	1B.3 G2 S2	Perennial bulbiferous herb. Occurs in granitic, sandy, or serpentinite soils and rocks within chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland habitats. Grows in elevations ranging from 1065 to 3775 feet amsl. Blooming period is April through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Castilleja lasiorhyncha</i> San Bernardino Mountains owl's-clover	1B.2 G2? S2?	Annual herb (hemiparasitic). Occurs in mesic rocks within chaparral, meadows and seeps, pebble (pavement) plain, riparian woodland and upper montane coniferous forest habitats. Found at elevation ranging from 4265 to 7840 feet amsl. Blooming period is May through August.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	1B.1 G3G4T2 S2	Annual herb. Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Grows in elevation from 0 through 2,100 feet amsl. Blooming period is April through September.	No	Not Expected: The project site provides marginal habitat for this species, but no tarplants were observed during the May 2023 field survey.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE SE 1B.2 G4?T1 S1	Annual herb (hemiparasitic). Occurs on coastal dunes and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 98 feet amsl. Blooming period is May through October (November).	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	1B.1 G3G4T2 S2	Annual herb. Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 through 3,773 feet amsl. Blooming period is April through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE SE 1B.1 G1 S1	Annual herb. Occurs on flood deposited terraces and washes in chaparral, coastal scrub, and alluvial fan sage scrub habitats. Found at elevations ranging from 1,181 through 2,690 feet amsl. Blooming period is April through June.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	FE SE 1B.1 G4T1 S1	Perennial herb. Grows in sandy or gravelly soils within chaparral and coastal scrub (alluvial fan) habitats. Found at elevations ranging from 298 through 2,001 feet amsl. Blooming period is April through September.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Eriophyllum lanatum</i> var. <i>obovatum</i> southern Sierra woolly sunflower	4.3 G5T4 S4	Perennial herb. Grows in loamy and sandy soils within lower montane coniferous forest and upper montane coniferous forest habitats. Found at elevations ranging from 3655 to 8205 feet amsl. Blooming period is June through July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Fimbristylis thermalis</i> hot springs fimbristylis	2B.2 G4 S1S2	Perennial rhizomatous herb. Grows in alkaline soils and near hot springs within meadows and seeps. Found at elevations ranging from 360 to 4395 feet amsl. Blooming period is July through September.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Frasera neglecta</i> pine green-gentian	4.3 G4 S4	Perennial herb. Grows in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest habitats. Found at elevations ranging from 4595 to 8205 feet amsl. Blooming period is May through July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Imperata brevifolia</i> California satintail	2B.1 G4 S3	Perennial grass. Occurs in mesic areas, alkali seeps, and riparian habitats within coastal scrub, chaparral, riparian scrub, Mojavean scrub, and alkali meadows and seeps. Found at elevations ranging from 0 to 1,640 feet amsl. Blooming period is September through May.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Juglans californica</i> southern California black walnut	4.2 G4 S4	Perennial deciduous tree. Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet amsl. Blooming period is March through August.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to past continual weed abatement activities resulting in heavily disturbed and compacted surface soils. This conspicuous species was not observed during the May 2023 field survey.
<i>Juncus duranii</i> Duran's rush	4.3 G3 S3	Perennial rhizomatous herb. Habitats include lower and upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 5,801 to 9,199 feet amsl. Blooming period is July through August.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> ocellated Humboldt lily	4.2 G4T4? S4?	Perennial bulbiferous herb. Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet amsl. Blooming period is March through July (August).	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Lycium parishii</i> Parish's desert-thorn	2B.3 G4 S1	Perennial shrub. Grows in coastal scrub and Sonoran Desert scrub habitats. Found at elevations ranging from 443 to 3,281 feet amsl. Blooming period is March through April.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Malacothamnus parishii</i> Parish's bush-mallow	1A GXQ SX	Perennial deciduous shrub. Found in chaparral and coastal scrub habitats. Found at elevations ranging from 1,000 to 1,493 feet amsl. Blooming period is June through July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Muhlenbergia californica</i> California muhly	4.3 G4 S4	Perennial rhizomatous herb. Found in mesic areas, meadows, seeps, and streambanks within chaparral, coastal scrub, and lower montane coniferous forest. Found at elevations ranging from 328 to 6,562 feet amsl. Blooming period is June through September.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Schoenus nigricans</i> black bog-rush	2B.2 G4 S2	Perennial herb. Grows in alkaline soils within marsh and swamp habitats. Found at elevations ranging from 490 to 6560 feet amsl. Blooming period is August through September.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Streptanthus bernardinus</i> Laguna Mountains jewelflower	4.3 G3G4 S3S4	Perennial herb. Occurs in chaparral and lower montane coniferous forest habitat. Found at elevations ranging from 2,198 to 8,202 feet amsl. Blooming period is May through August.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.

Table D-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
<i>Streptanthus campestris</i> southern jewelflower	1B.3 G3 S3	Perennial herb. Occurs in open, rocky areas within chaparral, lower montane coniferous forest, and pinyon and juniper woodland. Found at elevations ranging from 1985 to 8500 feet amsl. Blooming period is from May to July.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils. Further, the project site is outside of known elevation ranges for this species.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	1B.2 G2 S2	Perennial rhizomatous herb. Occurs near ditches, streams, and springs within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes, and valley/foothill grassland. Grows in elevations ranging from 0 through 6,700 feet amsl. Blooming period is July through November.	No	Not Expected: Suitable habitats preferred by this species are not present within the project site. The project site primarily consists of disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
<i>Yucca brevifolia</i> western Joshua tree	SC G3G4 SNR	Angiosperm. Tree in the Agavaceae family that is native to the Mojave Desert, occurring in several different vegetation communities including its own Joshua tree woodland.	No	Not Expected: The project is located outside of the native range of this species and was not observed on-site during the field survey.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Observed On-site	Potential to Occur
SPECIAL-STATUS VEGETATION COMMUNITIES				
<u>CNDDB/Holland (1986)</u> Riversidian Alluvial Fan Sage Scrub <u>MCV (1995)</u> Scalebroom Series <u>NVCS (2009)</u> <i>Lepidospartum squamatum</i> intermittently flooded Shrubland Alliance	G3 S3	Found at elevations ranging from 164 to 4,922 feet amsl on intermittently or rarely flooded, low-gradient alluvial deposits along streams, washes, and fans. Scalebroom (<i>Lepidospartum squamatum</i>) is dominant, co-dominant, or conspicuous in the shrub canopy with burrobrush (<i>Ambrosia salsola</i>), California sagebrush, mule fat (<i>Baccharis salicifolia</i>), bladderpod (<i>Cleome isomeris</i>), California cholla (<i>Cylindropuntia californica</i>), brittlebush (<i>Encelia farinosa</i>), thick leaved yerba santa (<i>Eriodictyon crassifolium</i>), hairy yerba santa (<i>Eriodictyon trichocalyx</i>), California buckwheat, chaparral yucca (<i>Hesperoyucca whipplei</i>), deerweed, laurel sumac (<i>Malosma laurina</i>), prickly-pear cactus (<i>Opuntia littoralis</i>), lemonade berry (<i>Rhus integrifolia</i>), sugar bush (<i>Rhus ovata</i>), skunkbrush (<i>Rhus aromatica</i>), and poison oak (<i>Toxicodendron diversilobum</i>). Emergent trees or tall shrubs may be present at low cover, including mountain mahogany (<i>Cercocarpus betuloides</i>), southern California black walnut, California juniper (<i>Juniperus californica</i>), California sycamore, Fremont cottonwood, or black elderberry (<i>Sambucus nigra</i>). Shrubs are less than 7 feet tall; canopy is open to continuous, and two tiered. Herbaceous is layer variable and may be grassy.	No	Absent: This vegetation community was not observed within the project site.
<u>CNDDB/Holland (1986)</u> Southern Sycamore Alder Riparian Woodland <u>MCV (1995)</u> California Sycamore Series <u>NVCS (2009)</u> <i>Platanus racemosa</i> Woodland Alliance	G3 S3	Found at elevations ranging from sea level to 7,874 feet amsl in gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains that are subject to high-intensity flooding. Soils are rocky or cobbly alluvium with permanent moisture at depth. California sycamore is a dominant or co-dominant in the tree canopy with white alder (<i>Alnus rhombifolia</i>), southern California black walnut, Fremont cottonwood, coast live oak, valley oak, narrowleaf willow, Gooding's willow, polished willow, arroyo willow, yellow willow, Peruvian pepper tree (<i>Schinus molle</i>), and California bay.	No	Absent: This vegetation community was not observed within the project site.

* U.S. Fish and Wildlife Service (USFWS)

- FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.
- FT Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- FC Candidate – any species which has been designated as a candidate eligible for considering to be listed under the Federal Endangered Species Act.

California Department of Fish and Wildlife (CDFW)

SE	Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
ST	Threatened – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required under the California Endangered Species Act.
SC	State Candidate for listing - The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered and threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered and threatened species.
FP	Fully Protected – any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.
SSC	Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria: - is extirpated from California or, in the case of birds, in its primary seasonal or breeding role; - is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed. - is experiencing, or formerly experienced, serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or - has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.
WL	Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.
CR	Rare - a native plant that is designated as “rare” under the California Fish and Game Code.

California Native Plant Society (CNPS) California Rare Plant Rank

1A	Presumed extirpated in California and either rare or extinct elsewhere.
1B	Plants rare, threatened, or endangered in California and elsewhere.
2B	Plants rare, threatened, or endangered in California but more common elsewhere.
3	Plants about which more information is needed – Review List.
4	Plants of limited distribution – Watch List.

Threat Ranks

.1	Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).
.2	Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Intraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

G1/T1	Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2/T2	Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3/T3	Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4/T4	Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5/T5	Secure – Common; widespread and abundant.
S1	Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2	Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer),

steep declines, or other factors making it very vulnerable to extirpation from the nation or State.

S3 Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

Attachment E

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