

BIOLOGICAL RESOURCE STUDY

TAFT HIGHWAY AND MICHELE STREET GENERAL PLAN AMENDMENT/ZONE
CHANGE APN 514-060-27

BAKERSFIELD, KERN COUNTY, CALIFORNIA

Submitted to:

LAV/Pinnacle Consulting and Engineering Services
and
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1.0 Introduction

MESA Biological LLC (MESA) has prepared this Biological Resources Study (BRS) at the request of LAV/Pinnacle Consulting and Engineering Services (LAV/Pinnacle) on behalf of Mark Anderson and the Fred Geminiani 2008 Living Trust. On June 21, 2024, the City of Bakersfield Planning Division of the Development Services Department issued an incomplete application notice for a General Plan Amendment (GPA) and Zone Change (ZC) application associated with Assessor Parcel Number (APN) 514-060-27. As outlined in the incomplete application notice, the City of Bakersfield has requested that the applicant complete this BRS in support of the City of Bakersfield's California Environmental Quality Act (CEQA) evaluation.

This BRS will document the current existing conditions and evaluate the potential for project related impacts to biological resources. For continuity purposes throughout this report, the term "project site" will be used to address APN 514-060-27, and its 250-foot buffer area being evaluated within this report.

2.0 Project Location

The project site occurs in south Bakersfield, Kern County, California and falls within Section 36, Township 30 South, Range 27 East Mount Diablo Base and Meridian. More specifically, the project site falls directly north of State Highway 119 (Taft Highway), west of Michele Street and approximately one thousand feet west of State Highway 99 within the community of Pumpkin Center. The project site occurs within the Gosford United States Geological Survey (USGS) 7.5-minute Quadrangle. Attachment A – Figure 1 illustrates APN 514-06-27 while Attachment B shows the GPA and ZC exhibits.

3.0 Methodology

This BRE includes a review of relevant literature that was followed by a reconnaissance-level field survey conducted on July 26, 2024. The purpose of this analysis is to document the biological conditions found throughout the project site and to provide an analysis of the biological resources potentially occurring.

3.1 Database Queries

Information obtained included review of current and historical aerial imagery of the project site and vicinity. MESA also conducted a review of the California CDFW California Natural Diversity Database (CNDDB) (CDFW 2024a) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2024). Both CNDDB and CNPS reviews included a search of the Gosford USGS 7.5-minute Quadrangle and the surrounding 8 Quadrangles (Oildale, Oil Center, Lamont, Weed Patch, Conner, Millux, Stevens, and Rosedale). In addition to the CNPS and CNDDB queries, MESA conducted a review of the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS 2024a) website for detail on federal resources potentially occurring in the project site. As a result of the database queries, a list of potentially occurring species was compiled and provided within **Attachment C**. The

tables have been formulated to describe the species habitat requirements, their listing status, and a brief description of their potential for occurrence in the project site. The review of this literature provided biologists with general information and a broad overview of the potential biological resources found in the vicinity of the project site. In addition, information was also gathered from a variety of other sources including the CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2024b); USFWS Critical Habitat Portal (USFWS 2024b); USFWS National Wetlands Inventory (NWI) (USFWS 2024c); and the USGS National Hydrography Dataset (NHD) (USGS 2024).

3.2 Field Reconnaissance Surveys

On July 26, 2024, MESA conducted a field survey documenting existing site conditions in the project site. The field survey focused on evaluating the potential for sensitive plant and wildlife species as well as habitat for nesting birds and wetlands or waterways protected by federal and state laws. During the field survey, MESA biologists Samantha Medellin and Rory Miller conducted pedestrian transects within the project site to achieve 100% visual coverage. Inaccessible portions of the project site (project site and 250ft buffer) were evaluated using binoculars from within the project site. An inventory of all plants and wildlife species were recorded and vegetation communities were analyzed. In addition, MESA biologists evaluated the potential for presence of the special-status species identified by database review or otherwise considered to have the reasonable potential to be present.

4.0 Results and Findings

Resulting from the database queries discussed above, a total of 30 plant species, 29 wildlife species and 5 sensitive vegetation communities were identified by database query as potentially occurring. Each of these special-status plant species, wildlife species and vegetation communities were analyzed to determine potential presence. Potential of occurrence for these species and vegetation communities identified through database query are based on the presence or absence of suitable habitat for each special-status species or vegetation community reported. Multiple sources of pertinent scientific literature were reviewed, and the technical expertise of MESA staff was utilized to determine the habitat requirements, ecology, and distribution of the special-status species or vegetation community potentially occurring in the project site. All occurrences of special-status species within 5-miles of the project site recorded within the CNDDDB are plotted in Attachment A – Figures 2 and 3. The potential for each special-status species to occur in the project site has been provided in Attachment C. The potential for occurrence was established according to the following criteria:

Not Expected. Habitat in the project site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Low Potential. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to project site is unsuitable or of very poor quality. The species is not likely to occur.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the project site is unsuitable. The species has a moderate probability of occurrence.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the is highly suitable. The species has a high probability of occurrence.

Present. Species observed in the project site or has been recorded (e.g., CNDDDB, other reports) in the project site recently (within the last 5 years).

4.1 Vegetation Communities and Land Cover

The primary land cover within the project site consists of previously cultivated and cleared or grubbed land presently occurring as fallow land comprised mainly of non-native grasses and some sporadic weedy herbaceous plant species. Evidence of previous cultivation and clearing or grubbing were evident throughout the project site. Historical aerial imagery revealed that the project site contained some form of row crop from the year 2004 through 2016. A list of plant species identified during the field survey is provided in Attachment D. The western boundary of the project site is transected by a concrete lined canal referred to as the West Branch Canal that contained flowing water. A residence neighbors the site to the west, while open fallow field occurs to the west and commercial businesses neighbor the south and east of the site. Representative site photographs depicting habitats and land uses are provided in Attachment E.

4.2 Special-Status Plants Species

Special-status plants are those that are proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA) and those listed or candidates for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA) and plants with a California Rare Plant Rank (CRPR) of 1, 2 or 3.

As noted above, the results of the database query indicated a total of 30 special-status plants listed with CPR ranking 1, 2 and 3 that are known or have the potential to occur within the region. The potential for each of these plant species to occur has been evaluated based primarily on the presence of suitable habitat determined during the reconnaissance field survey. The proximity to CNDDDB and CNPS documented occurrences were also evaluated (Attachment A – Figures 2 and 3)

No dried vegetative remnants of these special-status plant species found to potentially occur were detected within the project site during the reconnaissance level survey. Sensitive plants are not expected to occur due to the historical cultivation for the purposes of growing and harvesting field crops and past land clearing practices. Although the survey occurred outside of the blooming period for almost all sensitive plants identified, the altered soil composition, reduced microbial diversity and compacted soil structure provide inadequate conditions for sensitive

plants. The depletion of the seed bank during periods of cultivation and grubbing would significantly prohibit the potential for recovery of sensitive plants that once may have potentially occurred. Sensitive plant species are not expected to occur on the project site.

4.3 Special Status Wildlife Species

Special-status wildlife is defined as listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under FESA or those listed or candidates for listing as rare, threatened, or endangered by the CDFW under CESA and wildlife designated as “Species of Special Concern” (SSC) by the CDFW or “Fully Protected” under the California Fish and Game Code (CFGC). The 29 species provided in Attachment C are species listed as endangered or threatened by the federal government or State of California, CDFW species of special concern and/or CDFW watch list species. For the purposes of this study only the species that have been identified with a moderate or higher potential to occur will be further discussed in this study.

Of these 29 species, the San Joaquin kit fox (*Vulpes macrotis mutica*), Western burrowing owl (*Athene cunicularia*) and Bakersfield legless lizard (*Anniella grinnelli*) have been evaluated as having a moderate potential to occur on the project site and will be further discussed.

4.4 Wetlands and Waterways

The USFWS National Wetlands Inventory (NWI) and the USGS National Hydrography Dataset (NHD) were reviewed to determine if potentially jurisdictional waterways occur within the project site. Review of the NWI and NHD identified the West Branch Canal that transects a portion of the western boundary of the project site. This concrete lined irrigation canal conveys water to nearby farmlands. In California, canal systems may be considered jurisdictional waterways depending on their connectivity with natural water bodies and the impact they may have on the environment. The CDFW requires a Lake or Streambed Alteration Agreement for activities that would alter the flow, bed, bank or channel of a stream or lake. Due to the lack of riparian habitat and its lack of connectivity to other waterbodies would not likely identify as a CDFW jurisdictional waterway. For definitive clarification, consultation with CDFW would be advisable if impacts to this waterway should occur.

4.5 Nesting Birds

CFGC Section 3503 and the federal Migratory Bird Treaty Act of 1918 (MBTA) protect native bird species and their nests. Much of the project site and surrounding lands contain nesting habitat for several avian species protected by federal and state regulations. Implementation of the proposed project may result in direct or indirect effects to nesting bird species, should they be present within the project site and surrounding lands. Although the project site contains lands that have been altered the site still contains opportunities for tree, shrub and ground nesting birds. Red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaidura macroura*), western meadowlark (*Sturnella neglecta*) and common raven (*Corvus corax*) were all observed during the survey and could potentially nest within the project site or surrounding vicinity.

5.0 Discussion and Recommendations

The project site contains potentially suitable habitat for three special-status wildlife species and several nesting birds. If the project site is subject to environmental review under CEQA and there will be impacts to special status species that are not listed as threatened or endangered under CESA and/or FESA, it may be considered significant and compensatory mitigation and/or specific avoidance and minimization measures may be required before and during construction of the project. The following discussion has been prepared to provide specific avoidance and minimization measures for the resources identified to potentially occur.

5.1 Special-Status Wildlife Species

The project site contains potentially suitable habitat for three special-status wildlife species. A brief description of each species along with a discussion of recommendations to minimize and avoid potential impacts are included.

Western burrowing owl

The western burrowing owl is a CDFW Species of Special Concern and is afforded legal protections under the MBTA and California Fish and Game Code (CFGF) Sections 3503, 3503.5, 3505 and 3515 as a raptor or bird of prey.

This species is native to open landscapes in western North America and thrive in a variety of wide-open, sparsely vegetated areas such as prairies, deserts, grasslands and agricultural fields. Burrowing owls typically nest in underground burrows and often utilize burrows abandoned by ground squirrels but can also modify other smaller rodent species burrows or use surrogate structures such as pipes and culverts for refuge. This diurnal species is often observed walking, running, flying low or perched on mounds, bushes and fence posts near their burrow systems. Burrowing owls are known for their ability to adapt to various environments including those lands that have been altered by human development. This species often resides in fallow lands, vacant lots and localities within sometimes close proximity to human developments.

Discussion: Although the project site does not contain open native habitat for this species and no burrowing owls or their sign (burrows, whitewash, prey remains pellets etc.) were found, they are known to occupy fallow lands such as those found in the project site. In combination with the fallow land, burrowing owls are known to utilize ground squirrel burrows for refuge or for nesting. The presence of ground squirrel burrows and other smaller rodent burrows provide potential for this species to occur. Although limited, the project site and surrounding vicinity does contain some foraging potential.

If ground disturbing activities will occur, pre-disturbance surveys in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) should be followed to detect presence of this species.

San Joaquin kit fox

The San Joaquin kit fox is afforded legal protection under the Federal Endangered Species Act (FESA) as endangered and the California Endangered Species Act (CESA) as a threatened

species. This species is adapted to the unique conditions of the San Joaquin Valley. Kit foxes are typically found in the valley floor and foothills of the San Joaquin Valley, from San Joaquin County to Kern County and in the valleys along the Coast Range, including Panoche and Cuyama valleys and in the Carrizo Plain in San Luis Obispo County. It is often found in dry annual grasslands or open lands containing scattered shrubs or brush. They prefer open areas with loose textured soils suitable for denning and an abundance of rodent species for foraging. This species has also adapted to urban environments such as green spaces, vacant lots, fallow fields and residential developments. In the urban environment, this species is known to occupy open pipes and covered structures for refuge.

Discussion: Although there was no sign of kit fox (scat, tracks, prey remains, dens, etc.) found during the survey, the project site does provide potential opportunity for denning, primarily in the form of California ground squirrel burrows. Kit foxes are opportunistic feeders and will adjust their diets based on the availability of food source. As such, the location of the project site is not prohibitive in providing some form for foraging sources for kit fox. If ground disturbing activities will occur on the project site, pre-disturbance surveys in accordance with USFWS Standardized Recommendations for the Protection of the Endangered San Joaquin Kit Fox Prior to Ground Disturbance (USFWS 2011) should be conducted to determine kit fox presence.

Bakersfield Legless Lizard

The Bakersfield legless lizard is listed by the CDFW as a “species of special concern”. This species is adapted to live in specific habitats in the greater Bakersfield area. They often inhabit areas containing loose soil and abundant moisture, which are conducive to their burrowing ecology. Legless lizards are typically found beneath the surface under rocks, boards, and logs with conditions suitable for burrowing. Despite their reclusive nature, they have been discovered in very marginal habitat including vacant lots in Bakersfield and among oil producing areas south of Bakersfield.

Discussion: Leaf litter, logs and loose soils associated with the berm running parallel to the West Branch canal provide potentially suitable conditions for this species. Formal survey protocols for this species have not been published by resource agencies, therefore, it is recommended to consult with CDFW for the most up to date survey protocols prior to any surface disturbance.

Nesting Birds

As addressed above, the project site contains suitable nesting habitat for many avian species protected by the MBTA and CDGC. If project related activities are scheduled to occur during the avian nesting season (typically February 1 to September 15), then typical avoidance and minimization measures to prevent take of bird nests, eggs, or nestlings under CFGC and the MBTA could pose constraints on the project. The following are recommendations and possible constraints due to special-status birds and nesting birds within the project site.

A general pre-construction nesting bird survey should be conducted by a qualified biologist, within 14 days prior to the initiation of project related activities. If project related activity is stopped for more than 14 days during the nesting season, a pre-construction survey should be conducted prior to the re-start of project related activities.

6.0 Conclusion

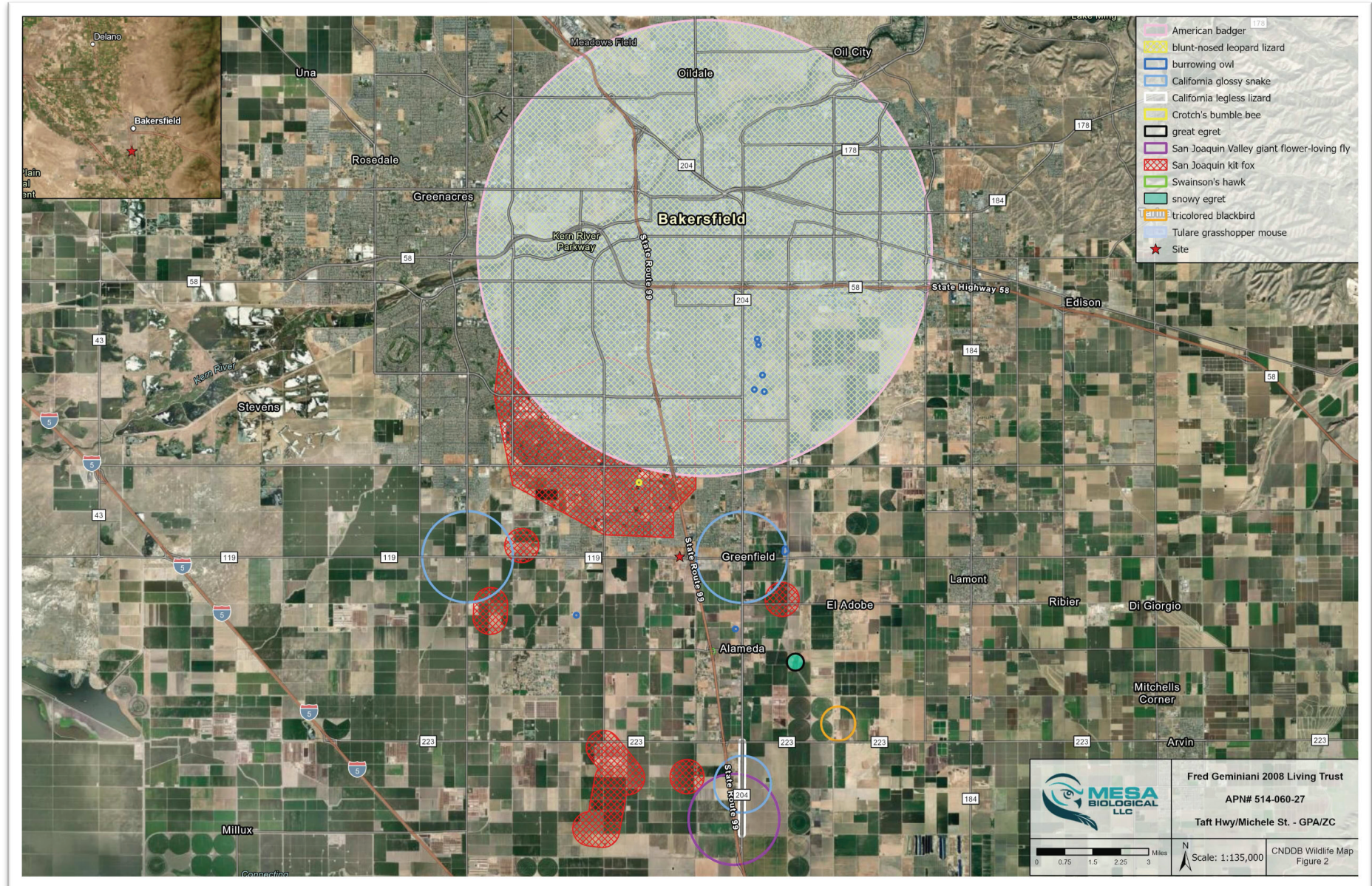
As noted above, this report is intended to identify sensitive biological resources and potential occurrence of special status species within the evaluation area. This report provides analysis sufficient to support CEQA, though further analysis may be required for compliance with FESA, or CESA, and/or the California Fish and Game Code. The study has determined that the project site and surrounding project site contains opportunity for the western burrowing owl, San Joaquin kit fox, Bakersfield legless lizard and several potential nesting birds. Additional surveys prior to implementation ground disturbance should be conducted as described in Section 5.1.

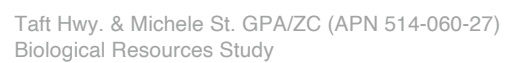
7.0 References

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- USGS. 2023. National Hydrography Dataset. <https://nhd.usgs.gov/index.html> (accessed December 2023).

**Attachment A. Taft Hwy. & Michele St. GPA/ZC
Figures**







Attachment B. Taft Hwy. & Michele St. GPA/ZC
General Plan Amendment and Zone Change Exhibits

GENERAL PLAN AMENDMENT EXHIBIT



VICINITY MAP

NO SCALE

LEGEND:

---	GPA BOUNDARY
---	EXISTING PARCEL/LOT LINE
---	EXISTING STREET RIGHT OF WAY
---	STREET CENTERLINE
---	ASSESSOR'S PARCEL NUMBER
APN	ASSESSOR'S PARCEL NUMBER
A	AGRICULTURE
A-1	LIMITED AGRICULTURE
C-2	REGIONAL COMMERCIAL
M-2	GENERAL MANUFACTURING
GC	GENERAL COMMERCIAL
HC	HIGHWAY COMMERCIAL
SI	SERVICE INDUSTRIAL
SR	SUBURBAN RESIDENTIAL
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT

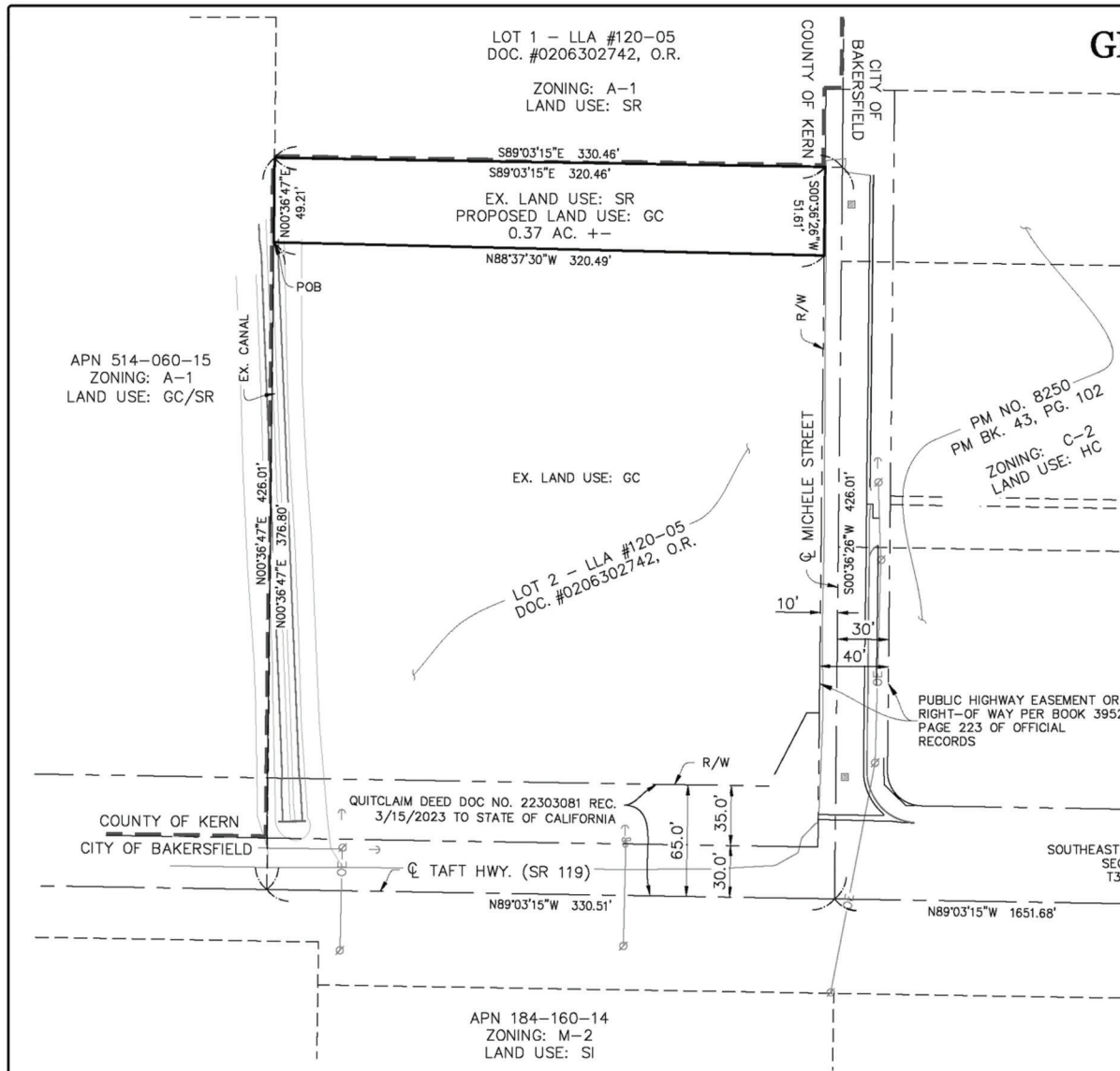
BASIS OF BEARINGS:

THE BEARING OF N89°03'15"W FOR THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 36 TOWNSHIP 30 SOUTH, RANGE 27 EAST, M.D.M PER RECORD OF SURVEY NO. 4207 BOOK 35, PAGE 57 WAS USED AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

SCALE: 1" = 60'

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The map displays the project location in the City of Waco, Texas. The project is located on Hughes Lane, between Taft Highway and W. Curnow Road, west of Michele St. The map includes the following street names: MCKEE ROAD, WIBLE ROAD, HUGHES LANE, TAFT HIGHWAY, W. CURNOW ROAD, MICHELE ST., and CONKLAVONI STREET. A highway shield for 99 is also present.


LEGEND:

_____	GPA BOUNDARY
-----	EXISTING PARCEL/LOT LINE
-----	EXISTING STREET RIGHT OF WAY
_____	STREET CENTERLINE
APN	ASSESSOR'S PARCEL NUMBER
A	AGRICULTURE
A-1	LIMITED AGRICULTURE
C-2	REGIONAL COMMERCIAL
M-2	GENERAL MANUFACTURING
GC	GENERAL COMMERCIAL
HC	HIGHWAY COMMERCIAL
SI	SERVICE INDUSTRIAL
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SCALE: 1" = 60'



A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '30' at the midpoint, and '60' at the right end.

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Attachment C. Taft Hwy. & Michele St. GPA/ZC
Special-Status Species Tables

Special-Status Plant Species in the Regional Vicinity (Nine Quad) of the Project Site

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
Plants			
<i>Astragalus hornii</i> var. <i>hornii</i> Hom's milk-vetch	1B.1	Playas, meadows and seeps. Found in alkaline substrate among lake margins. Elevation: 195 – 2790ft Blooms: May - October	Not Expected: Although CNDDDB records indicate historical observations of this species in the vicinity, the altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	1B.2	Valley and foothill grasslands, chenopod scrub, meadows and seeps. Found in sandy or alkaline substrate. Elevation: 0 – 1835ft Blooms: April - October	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Atriplex coronata</i> var. <i>vallicola</i> Lost Hills crownscale	1B.2	Valley and foothill grasslands, chenopod scrub, vernal pools. Found in alkaline substrate. Elevation: 165 – 2085ft Blooms: April - September	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Atriplex tularensis</i> Bakersfield smallscale	SE 1A	Chenopod scrub. Elevation: 295 – 655ft Blooms: June - October	Not Expected: Although CNDDDB records indicate historical observations of this species in the vicinity, the altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Calochortus striatus</i> alkali mariposa-lily	1B.2	Chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps. Elevation: 230 – 5235ft Blooms: April - June	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Caulanthus californicus</i> California jewel flower	CE/FE 1B.1	Valley and foothill grasslands, pinyon and juniper woodland, chenopod scrub. Found in sandy substrate Elevation: 200 – 3280ft Blooms: February - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Chloropyron molle</i> ssp. <i>hispidum</i> hispid salty bird's-beak	1B.1	Valley and foothill grasslands, playas, meadows and seeps. Found in alkaline substrate. Elevation: 5 – 510ft Blooms: June - September	Not Expected: Although CNDDDB records indicate historical observations of this species in the vicinity, the altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Delphinium recurvatum</i> recurved larkspur	1B.2	Valley and foothill grasslands, cismontane woodland, chenopod scrub. Elevation: 10 – 2590ft Blooms: March - June	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Diplacus pictus</i> Calico monkeyflower	1B.2	Cismontane woodland, broadleafed upland forest. Found in disturbed areas and granitic substrate. Elevation: 330 – 4690ft Blooms: March - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
<i>Eremalche parryi</i> ssp. <i>kernensis</i> Kern mallow	FE 1B.2	Valley and foothill grasslands, pinyon and juniper woodland, chenopod scrub. Found in dry, sometimes sandy openings, often at the ends of balds. Elevation: 230 – 4230ft Blooms: January (Feb) March - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Eschscholzia lemmonii</i> ssp. <i>kernensis</i> Tejon poppy	1B.1	Valley and foothill grasslands, chenopod scrub. Elevation: 525 – 3280ft Blooms: (Feb)March - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Hordeum intercedens</i> vernal barley	3.2	Valley and foothill grasslands, coastal scrubs and dunes, vernal pools. Found in depressions and saline flats. Elevation: 15 – 3280ft Blooms: March - June	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Imperata brevifolia</i> California satintail	2B.1	Coastal scrub, chaparral, Mojavean desert scrub, riparian scrub, meadows and seeps (often alkali) Found in mesic substrate. Elevation: 0 – 3985ft Blooms: September - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	1B.1	Vernal pools, playas, marshes and swamps (coastal salt) Elevation: 5 – 4005ft Blooms: February - June	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Layia leucopappa</i> Comanche Point layia	1B.1	Valley and foothill grasslands, chenopod scrub. Elevation: 330 – 1150ft Blooms: March - April	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Monolopia congdonii</i> San Joaquin woollythreads	FE 1B.2	Valley and foothill grasslands (sandy), chenopod scrub. Elevation: 195 – 2625ft Blooms: February - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Navarretia setiloba</i> Piute Mountains navarretia	1B.1	Valley and foothill grasslands (sandy), chenopod scrub. Elevation: 195 – 2625ft Blooms: February - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Opuntia basilaris</i> var. <i>treleasei</i> Bakersfield cactus	FE/SE 1B.1	Valley and foothill grasslands, cismontane woodland, chenopod scrub. Sometimes found in gravelly and sandy substrates. Elevation: 330 – 4755ft Blooms: April - May	Not Expected: Although CNDDDB records indicate historical observations of this species in the vicinity, the altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Puccinellia simplex</i> California alkali grass	1B.2	Valley and foothill grasslands, vernal pools, meadows and seeps, chenopod scrub. Found in vernal mesic, flats, alkaline substrate among lake margins. Elevation: 5 – 3050ft Blooms: March - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Stylocline citroleum</i> oil neststraw	1B.1	Valley and foothill grasslands, coastal scrub, chenopod scrub. Found in clay substrate. Elevation: 165 – 1310ft Blooms: March - April	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
<i>Stylocline masonii</i> Mason's neststraw	1B.1	Pinyon and juniper woodland, chenopod scrub. Found in sandy substrate. Elevation: 330 – 3935ft Blooms: March - May	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
<i>Tortula californica</i> California screw moss	1B.2	Valley and foothill grasslands, chenopod scrub. Found in sandy substrate. Elevation: 35 – 4790ft Blooms: N/A	Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this species.
Vegetation Communities			
Great Valley Cottonwood Riparian Forest			Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this community to occur.
Great Valley Mesquite scrub			Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this community to occur.
Valley Sacaton Grassland			Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this community to occur.
Valley Saltbush Scrub			Not Expected: The altered soil composition and depleted seed bank caused by historical cultivation would significantly prohibit the potential for this community to occur.
Invertebrates			
<i>Bombus crotchii</i> Crotch's bumble bee	SC	Occurs in a variety of habitats including open grasslands, scrublands, chaparral, desert margins, including Josua tree and creosote scrub and semi urban settings. Forages on but not limited to: Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Low Potential: Although CNDDDB records indicated an observation of this species within the vicinity of the project site, very minimal foraging potential and nesting substrate occurs.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT	Occurs in the Central Valley of California and depends on its host, the elderberry shrub that grows in riparian areas and in foothill oak woodlands.	Not Expected: No CNDDDB records of this species occurs within 5-miles of the project site and no elderberry shrubs occur in the project site.
<i>Dnaus Plexippus Plexippus</i> pop. 1 monarch – California overwintering population	FC	Winter roost sites occur along coastal California from Mendocino to Baja California in wind protected tree groves with nearby water source.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site and no habitat exists on the project site.
Amphibians			
<i>Spea hammondi</i> western spadefoot	FPT/SSC	Breeds in temporary rain ponds and vernal pools from winter rains. Mainly occurring in grassland habitat. Sometimes found in chaparral and oak woodlands	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site and no breeding sites occur.
Reptiles			
<i>Actinemys marmorata</i> northwestern pond turtle	FPT/SSC	Inhabits aquatic marshes, streams, rivers, ponds and lakes in California. Requires adequate basking sites containing deep pools with submerged logs and other debris. Also relies on sparsely vegetated nearby ground for digging nest sites.	Not Expected: No CNDDDB records of pond turtle occur within 5-miles of the project site. No aquatic habitats containing suitable basking or nesting opportunity occurs.

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
<i>Anniella grinnelli</i> Bakersfield legless lizard	SSC	Occurs from Bakersfield through the southern San Joaquin Valley. Often found in sandy soils burrowing through channels beneath cover boards or areas with plenty of leaf litter and debris. Typically found in moist substrates.	Moderate Potential: CNDDDB records indicate occurrences of this species within 5-miles of the project site. Very limited and marginal habitat occurs adjacent to the concrete lined canal transecting the western boundary. Leaf litter and organic material from the trees and shrubs in this area may also provide suitable habitat.
<i>Arizona elegans occidentalis</i> California glossy snake	SSC	Found throughout southern California particularly in desert regions. This nocturnal species prefers open areas containing soft loamy soils for burrowing.	Low Potential: Although CNDDDB records occur within 5-miles of the project site. The hard compacted soils and lack of burrowing opportunity would likely deter this species presence on the project site.
<i>Gambelia silia</i> blunt-nosed leopard lizard	FE/SE/SFP	Habitat for this species has been reduced parcels of undeveloped grassland and scrublands. This species occurs in open areas containing patchy or sparse vegetation with low drought tolerant shrubs.	Low Potential: Although one historical record of this species occurs in the vicinity of the project site, this species is typically found in open intact habitat. The previous disturbances on this project site would be a significant limiting factor.
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	SSC	Inhabits various regions throughout the San Joaquin Valley. This species prefers open terrain such as sand dunes, prairielands, desert scrub, rocky hillsides and open pine and oak woodlands. They are most abundant grasslands and desert scrub.	Low Potential: No CNDDDB records of this species occurs in the project site and the previous disturbances on the project site and developed land surrounding the project site would likely act as a deterrent to this species.
<i>Phrynosoma blainvill</i> coast horned lizard	SSC	Occurs in Chaparral, Coastal Sage scrub, Desert scrub and have been known to occur in mixed oak and grey pine forests that contain friable sandy loam soils. Sometimes occur in gravelly areas on moderate to low slopes.	Not Expected: No CNDDDB record occur within 5-miles of the project site and the previous disturbances and lack of suitable burrows significantly reduce the potential for occurrence.
Birds			
<i>Agelaius tricolor</i> tricolored blackbird	ST/SSC	Occurs only in very specific habitat ranges. This species is known to breed in freshwater marshes, particularly in dense stands of cattails and bulrushes. Outside of the breeding season, they forage in open habitats such as farm fields and pastures.	Not Expected: Although CNDDDB records of this species occurs within 5-miles, breeding habitat for this species does not occur in the project site and the site provides very little opportunity for foraging. This species is not expected to occur.
<i>Athene cunicularia</i> burrowing owl	SSC	Typically found in wide open sparsely vegetated areas like prairies, deserts, grasslands and agricultural fields. Due to urbanization, they are sometimes found in vacant lots. These owls reside in burrows created by grounds squirrels and other rodent species.	Moderate Potential: Several CNDDDB records of burrowing owl occur within the vicinity of the project site. Although their foraging potential would be limited with the lack of suitable prey base in the form of small fossorial rodents, this species could potentially occupy ground squirrel burrows on within this vacant land.
<i>Buteo swainsoni</i> Swainson's hawk	ST	Favor open habitats for foraging such as hay and alfalfa fields, pastures, grain crops and row crops for foraging. Often found nesting in large tress or structures near agricultural fields.	Not Expected: Although CNDDDB records indicate records of this species in the vicinity, nesting habitat is not present.
<i>Charadius nivosus nivosus</i> western snowy plover	FT/SSC	Found in sandy beaches, salt pond levees and shores of large alkali lakes.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site and suitable habitat does not exist on the project site.

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE	Requires specific habitats within riparian habitat along streams and rivers. Requires densely vegetated areas for breeding that contain willows, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected: No CNDDDB records occur within 5-miles of the project site and habitat for this species does not occur.
<i>Dendrocygna bicolor</i> fulvous whistling-duck	SSC	Found in shallow freshwater marshes in flat open land. Also occurs in rice fields, agricultural fields, ponds and lakes.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site and no habitat for this species occurs.
<i>Elanus leucurus</i> white-tailed kite	SFP	Often seen in open fields hovering in search of small rodents. They occur in open groves, river valleys, marshes, grasslands and desert grasslands. Requires trees for perching and nesting.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Suitable habitat for this species does not occur.
<i>Eremophila alpestris actia</i> California horned lark	WL	Occurs in open grasslands with low vegetation, close-cropped pastures and plowed fields. Prefers plenty of open ground for foraging and nesting.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Suitable habitat for this species does not occur.
<i>Plegadis chihi</i> white-faced ibis	WL	Shallow freshwater marshes and wetlands. Occupies dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Suitable habitat for this species does not occur.
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Suitable habitat for this species does not occur.
Mammals			
<i>Ammospermophilus nelsoni</i> Nelson's (=San Joaquin) antelope squirrel	ST	Occurs in arid upland desert scrub communities or open grassland and scrub areas that contain sparse vegetation for both food and shelter. Often shares lands containing kangaroo rat species.	Not Expected: No CNDDDB records of this species occurs within 5-miles. The previously disturbed nature of the project site and its surrounding land are significant factors towards lack of habitat suitability.
<i>Dipodomys ingens</i> giant kangaroo rat	CE/FE	Annual grasslands on the western side of the San Joaquin Valley, marginal habitat in alkali scrub. Need level terrain and sandy loam soils for burrowing.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.
<i>Dipodomys nitratoideus brevinasus</i> short-nosed kangaroo rat	SSC	Western side of San Joaquin Valley in grassland and desert shrub associations, especially <i>Atriplex</i> sp. Occurs in highly alkaline soils around Soda Lake. Needs friable soils. Favors flat to gently sloping terrain.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.
<i>Dipodomys nitratoideus nitratoideus</i> Tipton kangaroo rat	CE/FE	Saltbush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.
<i>Eumops perotis californicus</i> western mastiff bat	SSC	Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Found in chaparral, cismontane woodland, coastal scrub, Valley & foothill grassland.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.
<i>Onychomys torridus tularensis</i> Tulare grasshopper mouse	SSC	Hot, arid valleys and scrub deserts in the southern San Joaquin Valley. Found in chenopod scrub.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.

Scientific Name Common Name	Status Fed/State ESA & CRPR	Habitat Requirements	Potential to Occur
<i>Sorex ornatus relictus</i> Buena Vista Lake ornate shrew	SE/SSC	Marshlands and riparian scrub areas in the Tulare Basin. Prefers moist soil. Uses stumps, logs and litter for cover.	Not Expected: No CNDDDB records of this species occur within 5-miles of the project site. Habitat for this species does not occur on the project site.
<i>Taxidea taxus</i> American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Found in Valley & foothill grassland.	Low Potential: Although CNDDDB records of this species occur within 5-miles of the project site, the habitat on the project site would be considered marginal and lacking a suitable prey base.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	CT/FE	Annual grasslands or grassy open stages with scattered shrubby vegetation. Found in chenopod scrub, Valley & foothill grassland. Commonly found within urban settings utilizing man-made structures such as open pipes and under buildings and infrastructure of abandoned or vacant lots.	Moderate Potential: CNDDDB records of this species occur within 5-miles of the project site. Although no potential kit fox dens or sign of presence was found, the project site provides opportunity for denning. Populations of this species are known to thrive in in urban areas in close proximity to human development.

Special Status Species Acronyms/Abbreviations

FE: Federally Endangered	FT: Federally Threatened	FC: Federal Candidate
FPT: Federally Proposed Threatened	SE: State Endangered	ST: State Threatened
SC: State Candidate	SS: State Sensitive	SFP: State Fully Protected
SSC: CDFW Species of Special Concern	SFP: State Fully Protected	WL: Watchlist
SR: State Rare		

CNPR (CNPS California Rare Plant Rank):

- 1A = Plants presumed extirpated in California and rare or extinct elsewhere
- 1B = Plants rare, threatened, or endangered in California and elsewhere
- 2A = Plants presumed extirpated in California but common elsewhere
- 2B = Plants rare, threatened or endangered in California but more common elsewhere

CRPR Threat Code Extension

- .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 = Fairly endangered in California (20%-80% occurrences threatened)
- .3 = Not very endangered in California (less than 20% of occurrences threatened)

Attachment D. Taft Hwy. & Michele St. GPA/ZC
Species Observations

Plant Species Observations

Nerium oleander
Vulpia myuros
Avena barbata
Malva parviflora
Salsola tragus
Convolvulus arvensis
Brassica nigra
Amsinckia sp.
Cynodon dactylon
Eucalyptus sp.
Sisymbrium irio

oleander
rattail fescue
slender wild oat
cheeseweed
Russian thistle
field bindweed
black mustard
fiddleneck
Bermuda grass
eucalyptus
London rocket

Wildlife Species Observations

Buteo jamaicensis
Zenaidura macroura
Haemorrhous mexicanus
Sturnella neglecta
Corvus corax
Columba livia
Otospermophilus beecheyi

red-tailed hawk
mourning dove
house finch
western meadowlark
common raven
rock pigeon
California ground squirrel

Attachment E. Taft Hwy. & Michele St. GPA/ZC
Site Photographs



Site Photographs