PSOMAS

Balancing the Natural and Built Environment

August 23, 2023 Revised September 18, 2023

Connie Anderson T&B Planning, Inc Director of New Business Services/Project Manager 3200 El Camino Real, Suite 100 Irvine, California 92602 VIA EMAIL canderson@tbplanning.com

Subject: Results of the Focused Special Status Plant Survey Conducted for the L-4 Project in the

City of Lancaster, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report presents the findings of a special status plant survey conducted for the L-4 Project (hereinafter referred to as the "project site") located in the City of Lancaster, Los Angeles County, California (Exhibit 1). The purpose of the survey was to determine the presence or absence of special status plant species on the project site.

PROJECT LOCATION AND DESCRIPTION

The approximately 11-acre project site is located in the City of Lancaster, Los Angeles County, California. The project site is located south of West Avenue L, west of Sierra Highway, north of West Avenue L 4, and east of 8th Street West (Exhibit 1). The project site is located on the U.S. Geologic Survey's (USGS's) Lancaster West 7.5-minute quadrangle map (Exhibit 2). The project site is flat with elevations range from approximately 2,485 to 2,501 feet above mean sea level. Surrounding land uses consist of industrial, commercial, and undeveloped land.

Vegetation on the site is comprised of disturbed rubber rabbitbrush scrub and disturbed/developed (Exhibit 3). Soils mapped on the project site include Cajon loamy sand (0 to 2 Percent Slopes), and Hesperia fine sandy loam (0 to 2 percent slopes) (USDA NRCS 2023, Exhibit 4).

METHODS

Botanical surveys were floristic in nature and consistent with the protocols created by the California Department of Fish and Wildlife (CDFW) (CDFW 2018). Prior to the field surveys, a literature search was conducted to identify special status plant species reported from the vicinity of the project site. Sources reviewed included the USGS Lancaster West, Del Sur, Little Buttes, Rosamond, Rosamond Lake, Lancaster East, Palmdale Ritter Ridge.5-minute quadrangles in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023) and the CDFW's California Natural Diversity Database (CDFW 2023a).

Plants regulated by the California Desert Native Plants Act include the following:

• Juniperus californica (California juniper);

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- All species of Burseraceae family (elephant tree);
- Carnegiea gigantea (sahuaro cactus);
- Ferocactus acanthodes (barrel cactus);
- Castela emoryi (crucifixion thorn);
- Dudleya saxosa (Panamint dudleya);
- Pinus longaeva (bristlecone pine);
- Washingtonia filifera (fan palm);
- All species of the family Agavaceae (century plants, nolinas, yuccas);
- All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section;
- All species of the family Fouquieriaceae (ocotillo, candlewood);
- All species of the genus Prosopis (mesquites);
- All species of the genus Cercidium (palos verdes);
- Acacia greggii (catclaw);
- Atriplex hymenelytra (desert-holly);
- Dalea spinosa (smoke tree); and
- Olneva tesota (desert ironwood), including dead.

Rainfall received in the winter and spring determines the germination of many annual and perennial herb species. The region received approximately 7.02 inches of precipitation between July 2022 and May 2023 which is approximately 119 percent above average precipitation for this area (data taken from Palmdale Regional Airport) (CIMIS 2023).

Off-site reference populations in the region were monitored for annual and difficult-to-detect target species to ensure that the surveys were comprehensive (Table 1). This is especially relevant during periods of unusual rainfall patterns or below average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable on the project site. Desert cymopterus (*Cymopterus deserticola*) was observed in early bloom the week of April 3 near Almond Cove and North of Hinkley. Off-stie reference populations were not monitored for species with a California Rare Plant Rank (CRPR) of 3 or 4 (non-target species), large perennials which would be identifiable throughout the year, or for species lacking a publicly accessible reference population.

Psomas Biologist Sarah Thomas conducted special status plant survey on April 20 and May 19, 2023. The surveys comprised 6 total person-hours. The plant survey area included the entire project site boundary plus a 25-foot buffer (Exhibit 5). The potentially suitable habitats for special status plants on the project site were systematically surveyed to the extent possible during the site visit. All plant species observed were recorded in field notes. Plants were identified using taxonomic keys, descriptions, and illustrations in Jepson Flora Project (2023), Baldwin et al. (2012), Hickman (1993), and Munz (1974). Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023b) for special status species and the Jepson eFlora (Jepson Flora Project 2023) for all other taxa.

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If any special status plant species had been observed on the project site, they would be mapped Garmin handheld Global Positioning System unit and data would be collected on the number and phenology of individuals (estimated for large populations) and microsite characteristics (e.g., slope, aspect, soil texture, surrounding habitat, and associated species).

SURVEY RESULTS

Western Joshua trees (*Yucca brevivolia*), a Candidate State Listed species, were previously documented within the survey area. The location and description of western Joshua trees can be found in the Joshua tree report for the Project (GLA 2023). No other special status plants were observed on the project site. It should be noted that two palo verde trees (*Parkinsonia florida*), a species regulated by the California Desert Native Plants Act, occur on the northern boundary of the site; however, the Project site is outside the known range of the species and are the progeny of ornamental palo verde trees planted along the street bordering the site and therefore would not be regulated.

Table 1 identifies the special status plants reported from the literature review with their status, their potential to occur on the project site, and the survey results. A list of all plant species observed on the project site during the survey is included in Attachment A.

TABLE 1 SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE SURVEY AREA VICINITY

| Scientific Name | Common Name | CDFW | CRPR | Species Background | Potential |
|---|--------------------------|------|------|---|--|
| Astragalus hornii var. hornii | Horn's milk-vetch | | 1B.1 | Annual herb. Lake margins and alkaline soils in meadows, seeps, and playas; 196–2,788 ft. Southern California County Distribution: Kern, San Bernardino (Presumed extirpated). Blooming period: May–October | Not expected to occur, no suitable habitat present. |
| Astragalus preussii var. laxiflorus | Lancaster milk-vetch | | 1B.1 | Perennial herb. Chenopod scrub; elevation range unknown due to lack of records. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino. Blooming period: March–May | Not expected to occur, no suitable habitat present. |
| Calochortus striatus | alkali mariposa lily | | 1B.2 | Perennial bulbiferous herb. Alkaline and mesic soils in chaparral, chenopod scrub, Mojavean desert scrub, meadows, seeps, desert grasslands; 230–5,232 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–June | Not expected to occur, no suitable habitat present. |
| Canbya candida | white pygmy-poppy | | 4.2 | Annual herb. Gravelly, sandy, or granitic soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; 1,968–4,789 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, San Bernardino. Blooming period: March–June | Not expected to occur, no suitable habitat present. |
| Castilleja plagiotoma | Mojave paintbrush | | 4.3 | Hemiparasitic perennial herb. Great basin scrub (alluvial soils), lower montane coniferous forests, Joshua tree, Pinyon and juniper woodland; 984–8,200 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–June | Not expected to occur, no suitable habitat present. |
| Chorizanthe parryi var. parryi | Parry's spineflower | | 1B.1 | Annual herb. Sandy or rocky openings in chaparral, coastal scrub, cismontane woodland, and grassland; 902–4,001 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino. Blooming period: April–June | Not expected to occur, no suitable habitat present. |
| Chorizanthe spinosa | Mojave spineflower | | 4.2 | Annual herb. Sometimes alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas; 20–4,264 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–July | Not expected to occur, no suitable habitat present. |
| Cymopterus deserticola | desert cymopterus | | 1B.2 | Perennial herb. Sandy soil in Joshua tree woodland and Mojavean desert scrub; 2,066–4,920 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May. | Not expected to occur, marginally suitable habitat present. Not observed during focused surveys. |
| Eriastrum rosamondense | Rosamond eriastrum | | 1B.1 | Annual herb. Alkaline hummocks in often sandy soil in openings of chenopod scrub and the edges of vernal pools; 2,296–2,345 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–July | Not expected to occur, no suitable habitat present. |
| Eriophyllum mohavense | Barstow woolly sunflower | | 1B.2 | Annual herb. Chenopod scrub, Mojavean desert scrub, and playas; 1,640–3,149 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May | Not expected to occur, no suitable habitat present. |
| Gilia latiflora ssp. cuyamensis | Cuyama gilia | | 4.3 | Annual herb. Sandy soil in Pinyon and juniper woodland; 1,952–6,560 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–June | Not expected to occur, no suitable habitat present. |
| Goodmania luteola | golden goodmania | | 4.2 | Annual herb. Alkaline or clay soils in Mojavean desert scrub, meadows, seeps, playas, and grassland; 66–7,216 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–August | Not expected to occur, no suitable habitat present. |
| Loeflingia squarrosa var. artemisiarum | sagebrush loeflingia | | 2B.2 | Annual herb. Sandy soil in desert dunes, great basin scrub, and Sonoran desert scrub; 2,296–5,297 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–May | Not expected to occur, marginally suitable habitat present. Not observed during focused surveys. |
| Lycium torreyi | Torrey's box-thorn | | 4.2 | Perennial shrub. Coastal scrub and Sonoran desert scrub; -10–3,660 ft. Southern California County Distribution: Imperial, Riverside, San Bernardino, San Diego. Blooming period: January–November | Not expected to occur, marginally suitable habitat present. Not observed during focused surveys. |
| Muilla coronata | crowned muilla | | 4.2 | Perennial cormous herb. Chenopod scrub, Mojavean desert scrub, Joshua tree and Pinyon and juniper woodland; 2,509–6,429 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May | Not expected to occur, marginally suitable habitat present. Not observed during focused surveys. |
| Opuntia basilaris var. brachyclada | short-joint beavertail | | 1B.2 | Stem succulent shrub. Chaparral, Mojavean desert scrub, Joshua tree, Pinyon and juniper woodland; 1,394–5,904 ft. Southern California County Distribution: Los Angeles, San Bernardino. Blooming period: April–August | Not expected to occur, marginally suitable habitat present. Not observed during focused surveys. |
| Perideridia pringlei | adobe yampah | | 4.3 | Perennial herb. Serpentine or often clay soils in chaparral, cismontane woodland, coastal scrub, Pinyon and juniper woodland; 984–5,904 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July | Not expected to occur, no suitable habitat present. |
| Puccinellia simplex | California alkali grass | | 1B.2 | Annual herb. Saline flats, mineral springs; <2,953 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May | Not expected to occur, no suitable habitat present. |

TABLE 1 SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE SURVEY AREA VICINITY

| Scientific Name | Common Name | CDFW | CRPR | Species Background | Potential |
|------------------|---------------------|------|------|--|-----------------------------|
| Yucca brevifolia | western Joshua tree | CST | | Perennial herb. Desert flats, slopes; 1,312–7,546 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino, Riverside. Blooming period: March–June | Suitable habitat. Observed. |

CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank

Species Status:

State (CDFW)

Candidate State Threatened

CRPR

- 1B
- Plants Rare, Threatened, or Endangered in California and elsewhere Plants Rare, Threatened, or Endangered in California, but more common elsewhere 2B
- Plants of limited distribution watch list
- Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)

 Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

Although reference populations and regional rainfall amounts were monitored to ensure the scientific adequacy of these focused surveys, there is always a minimal potential for false negative survey results as species could possibly be present on a site but may not be detectable at the time of the surveys.

Psomas appreciates the opportunity to assist on this project. If you have any comments or questions, please contact Marc Blain at 626.351.2000.

Sincerely,

PSOMAS

Marc T. Blain

Senior Project Manager

Sarah Thomas

Biologist

Enclosures: Exhibit 1 – Project Location

Exhibit 2 – U.S. Geological Survey 7.5-Minute Digital Quadrangle

Exhibit 3 – Vegetation Types and Other Areas

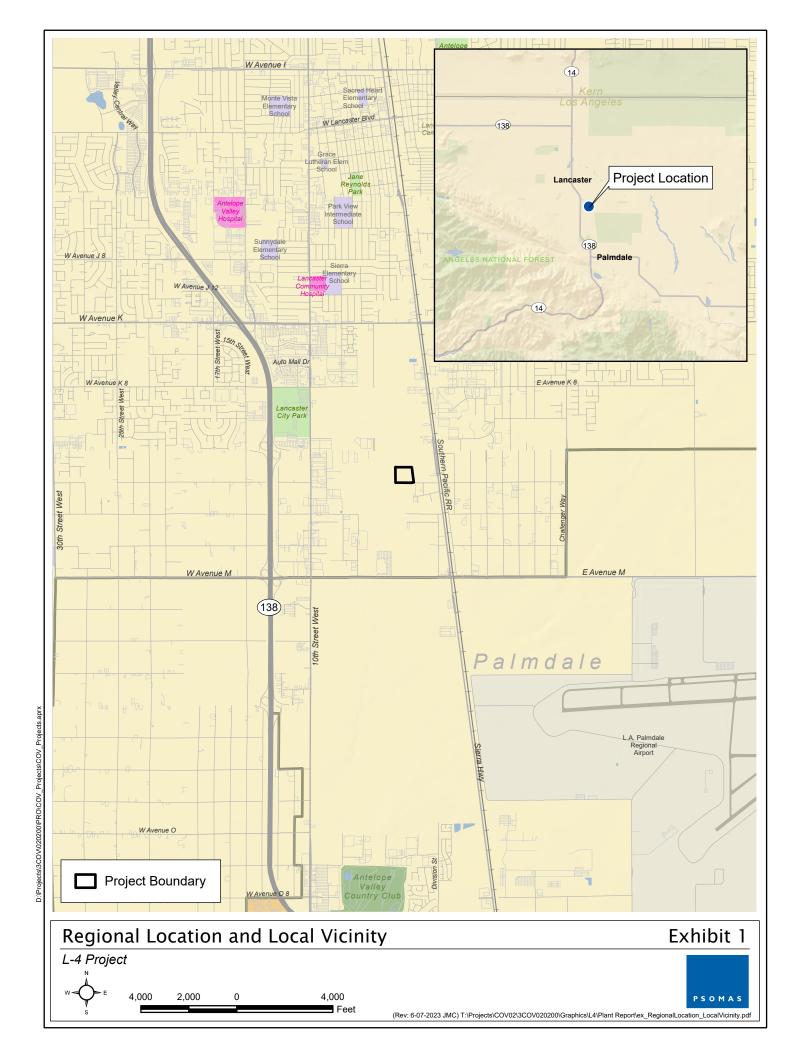
Exhibit 4 – Soils Map Exhibit 5 – Survey Area

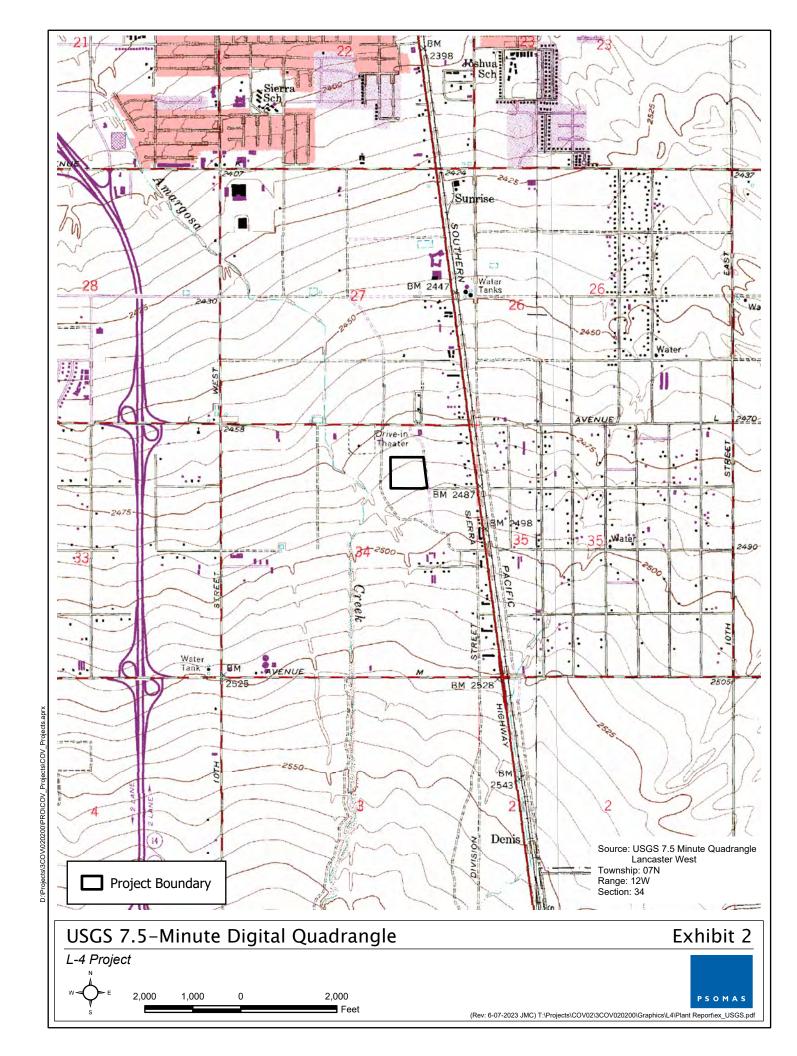
Attachment A – Plant Compendium

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ATTACHMENT A PLANT COMPENDIUM

PLANT SPECIES OBSERVED ON THE PROJECT SITE DURING THE FOCUSED PLANT SURVEY

| Species | | | | | | |
|-----------------------------------|-------------------------------|--|--|--|--|--|
| Scientific Name | Common Name | | | | | |
| E | EUDICOTS | | | | | |
| ASTERACEAE | - SUNFLOWER FAMILY | | | | | |
| Ambrosia acanthicarpa | annual bur-sage | | | | | |
| Ambrosia psilostachya | western ragweed | | | | | |
| Ambrosia salsola | common burrobrush | | | | | |
| Chaenactis stevioides | desert pincushion | | | | | |
| Ericameria nauseosa | rubber rabbitbrush | | | | | |
| Lasthenia gracilis | common goldfields | | | | | |
| Logfia filaginoides | California cottonrose | | | | | |
| Malacothrix coulteri | snake's-head | | | | | |
| BORAGINACE | EAE – BORAGE FAMILY | | | | | |
| Amsinckia tessellata | tessellated fiddleneck | | | | | |
| Pectocarya linearis ssp. ferocula | narrow-toothed pectocarya | | | | | |
| Phacelia distans | distant phacelia | | | | | |
| BRASSICACE | AE – MUSTARD FAMILY | | | | | |
| Descurainia sophia* | wise tansy mustard | | | | | |
| Hirschfeldia incana* | grayish shortpod mustard | | | | | |
| Sisymbrium altissimum* | tumble mustard | | | | | |
| Sisymbrium irio* | London rocket | | | | | |
| CARYOPHYLI | _ACEAE – PINK FAMILY | | | | | |
| Loeflingia squarrosa | spreading pygmyleaf | | | | | |
| CHENOPODIACE | AE – GOOSEFOOT FAMILY | | | | | |
| Atriplex canescens | four-wing saltbush | | | | | |
| EUPHORBIAC | EAE – SPURGE FAMILY | | | | | |
| Euphorbia albomarginata | rattlesnake sandmat | | | | | |
| FABACEAE | E – LEGUME FAMILY | | | | | |
| Parkinsonia florida | blue palo verde | | | | | |
| GERANIACEA | E – GERANIUM FAMILY | | | | | |
| Erodium cicutarium* | redstem filaree | | | | | |
| ONAGRACEAE – E | VENING PRIMROSE FAMILY | | | | | |
| Camissonia campestris | field sun cup | | | | | |
| POLEMONIAC | CEAE – PHLOX FAMILY | | | | | |
| Linanthus parryae | Parry's linanthus | | | | | |
| POLYGONACEA | E – BUCKWHEAT FAMILY | | | | | |
| Eriogonum gracillimum | rose-and-white wild buckwheat | | | | | |
| Eriogonum viridescens | two-toothed wild buckwheat | | | | | |
| SOLANACEAE | - NIGHTSHADE FAMILY | | | | | |
| Lycium andersonii | Anderson's box-thorn | | | | | |
| Lycium cooperi | Cooper's box-thorn | | | | | |
| | IONOCOTS | | | | | |
| AGAVACE/ | AE – AGAVE FAMILY | | | | | |
| Yucca brevifolia | western Joshua tree | | | | | |

PLANT SPECIES OBSERVED ON THE PROJECT SITE DURING THE FOCUSED PLANT SURVEY

| Species | | | | | |
|----------------------------------|----------------------------|--|--|--|--|
| Scientific Name | Common Name | | | | |
| POACEAE – GRASS FAMILY | | | | | |
| Bromus madritensis* | foxtail chess | | | | |
| Bromus tectorum* | cheat grass | | | | |
| Hordeum murinum* | wall barley | | | | |
| Schismus barbatus* | barbed Mediterranean grass | | | | |
| THEMIDACEAE – BRODIAEA FAMILY | | | | | |
| Dipterostemon capitatus | blue dicks | | | | |
| * Non-native or invasive species | | | | | |