BIOLOGICAL TECHNICAL REPORT: BASELINE ROAD MASTER PLAN

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INTRODUCTION

The City of Upland is considering a proposed master plan on a 98 acre site at the junction of Baseline Road (16th St.) and Interstate 210. This report addresses biological resources occurring, or potentially occurring, on the property. The project site is north of Baseline Road and southeast of the 210 Freeway. On the east, it adjoins an existing residential tact and a water treatment facility. The westernmost 2 acres of the site are in the City of Claremont (Los Angeles Co.). Much of the site is a former sand and gravel quarry. The proposed project would develop a shopping center a city park on the site.

METHODS

Scott D. White reviewed available literature to identify special status plants and animals known from the project site and vicinity. Literature sources included the California Natural Diversity Data Base (CNDDB 2003, USGS Ontario, Mt. Baldy, Cucamonga Peak, Glendora, Guasti, and San Dimas 7½' topo quads), California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001), the CNPS *Electronic Inventory* (2003, for the same quads) and compendia of special status species published by the US Fish and Wildlife Service (1999) and California Department of Fish and Game (2003a, 2003b). All species identified by this literature review, as well as others known from the general region, are included in Appendix 1 or 2 (attached). Appendix 1 lists those species not considered for this report due to elevational or geographic ranges, or to specialized habitat requirements not found on the site. Appendix 2 lists special status species known from comparable habitats within the region and summarizes their natural history, agency status, and occurrence probability on-site.

Scott D. White visited the site on 5 and 7 September 2003 to document plants and animals on

the site and describe vegetation and habitat. All accessible areas on the site were walked over. Two areas on the site, a composting facility and the former gravel quarry, were not accessible (the quarry is fenced, and the composting facility was avoided due to vehicle and equipment use). During both visits, weather was hot and clear with little wind. A total of about 8 hours were spent on the site. All species seen were recorded in field notes. Plants of uncertain identity were collected and subsequently identified from keys, descriptions and illustrations in Abrams (1923, 1944, 1951), Abrams and Ferris (1960), Hickman (1993) and Munz (1974); voucher specimens of these species will be placed in the herbarium collection at Rancho Santa Ana Botanic Garden. A list of all species observed is attached.

RESULTS

Vegetation and Habitat

The site is on the bajada below the San Gabriel Mountains, on the historic floodplain of San Antonio Creek. Soils are made up of alluvial and colluvial sand, gravel and rock. Prior to historic land use changes, the entire site would have been covered by alluvial fan sage scrub vegetation (Smith 1980). Much of the property has been altered by other land uses, including the former sand and gravel quarry on the northern part of the site; a large triangular parcel in the western part of the site which evidently also was used for sand and gravel quarrying and perhaps for equipment staging during construction of the 210 Freeway; and the composting facility.

There are a few small remnant patches of alluvial fan sage scrub within the triangular area in the western part of the site, and a single larger patch in the southeastern corner. These areas are dominated by native shrubs, including California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), spiny redberry (*Rhamnus crocea*), and chaparral yucca (*Yucca whipplei*). Scalebroom (*Lepidospartum squamatum*), the most characteristic shrub of alluvial fan sage scrub, also occurs regularly throughout these parts of the site. These areas correspond to the mature phase of alluvial fan sage scrub, described by Smith (1980). This alluvial shrubland is regarded as a special status vegetation type by the California Department of Fish and Game (CNDDB 2002).

The former quarry area was not visited, but it may hold some remnant or early-successional native vegetation. In this region, long-inactive gravel quarry slopes generally become vegetated with a mix of native shrubs (California buckwheat, brittlebush, etc.) and non-native grasses and forbes including brome grasses (*Bromus* spp.), mustards (*Brassica* spp.), and tocalote (*Centaurea melitensis*). Disused quarry floors tend to be compacted and generally support primarily non-native weedy species, but the lowest areas in quarry bottoms may pool water during all or part of the year and may support adventive riparian plants, particularly mulefat (*Baccharis salicifolia*) around their margins.

Vegetation on the site would be expected to support local wildlife species occurring in similar arid shrublands throughout the region. Examples include reptiles (side-blotched lizard, western fence lizard, southern alligator lizard, gopher snake, southwestern pacific rattlesnake), birds (mourning dove, spotted towhee, California towhee, Bewick's wren), and mammals (California ground squirrel, agile kangaroo rat, deer mouse, coyote, and bobcat).

The effects of habitat fragmentation were reviewed by Saunders et al. (1990) and Soule et al. (1992), among many others. In many regions, land development and linear structures (e.g., roadways) have converted once-contiguous habitat into scattered patches separated by barriers, so that individual animals and entire populations are now isolated in remnant habitat "fragments." Depending on their size and other characteristics, these fragments may not support

viable populations of some animals. For example, certain bird populations (including California gnatcatcher) become extinct when their habitat is fragmented by urban development in San Diego (Soule et al. 1988).

The Upland site is largely isolated from other open space. It is bounded by the 210 Freeway on the north and west, a water treatment plant and residential housing on the east, and Baseline Road on the south. These surrounding land uses tend to isolate or fragment natural habitat and wildlife populations within them. The result is that many species cannot or do not access the site because of barriers to their movement, and species left within the isolated habitat patch tend to decline in numbers. Due to its isolation from large areas of natural open space, the project site probably supports only remnant populations any native wildlife species whose movement is interrupted by surrounding land uses and roadways.

Special Status Species

Plants or animals may be considered "sensitive"due to declining populations, vulnerability to habitat change, or restricted distributions. Certain species have been listed as threatened or endangered under state or federal Endangered Species Acts. Other species have not been listed, but declining populations or habitat availability cause concern for their long-term viability. These species generally appear on lists compiled by resource management agencies or private conservation organizations.

Special Status Plants

Based on habitat occurring on the project site, we conclude there is a low or moderate potential that several special status plants could occur on the site (see Appendices 1 and 2). We did not observe any of these plants on the site, but we visited the property outside their flowering or growing seasons, and we therefore cannot make a conclusion of "absent" from the surveys.

Plants with a low or moderate probability of occurring on the site are: Plummer's mariposa lily (*Calochortus plummerae* moderate probability in remnant shrublands), Parry's spineflower (*Chorizanthe parryi* var. *parryi*, moderate probability in remnant shrublands), smooth tarplant (*Hemizonia laevis*, low probability, throughout site), mesa horkelia (low probability, remnant shrublands), southern California black walnut (*Juglans californica* var. *californica*, low probability in former quarry area), Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*, low probability in remnant shrublands), and California spineflower (*Mucronea californica*, low probability in remnant shrublands). None of these plants are listed as threatened or endangered under state or federal Endangered Species Acts or meets criteria for listing; instead, they are generally regarded as "special plants" by the California Department of Fish and Game and are included in CNPS's Inventory (Appendix 2).

Special Status Wildlife

Based on habitat, geographic range, and elevation, we conclude there is a low or moderate potential that several special status animals could occur on the site (see Appendices 1 and 2). We did not observe any of these animals on the site, but we did not conduct formal surveys for presence or absence.

Reptiles: Several special status reptiles could occur, with probabilities ranging from moderate to high. These include San Diego banded gecko, coastal western whiptail, San Diego horned lizard, rosy boa, San Bernardino ringneck snake, red diamond rattlesnake, and coast patch-nosed snake. None of these species is listed as threatened or endangered under state or federal Endangered Species Acts or meets criteria for listing; instead, they are generally regarded

as species of special concern by the California Department of Fish and Game (see Appendix 2).

Birds: Listed threatened or endangered birds known from the general area are generally limited to riparian habitats (e.g., southwestern willow flycatcher, least Bell's vireo) or coastal sage scrub (California gnatcatcher). There is no riparian habitat on the site (except perhaps adventive shrubby riparian vegetation in the quarry bottom), and we conclude that birds using this habitat are absent from the site (southwestern willow flycatcher and least Bell's vireo could briefly visit the site during migration, but not during breeding season).

We conclude there is a low probability that California gnatcatcher could occur on the project site due to presence of suitable habitat and historic occurrences in the region. The isolation from surrounding undisturbed habitat makes the probability that California gnatcatcher could occur very low, and the site is not within the area proposed as critical habitat by the US Fish and Wildlife Service (2003). Focused field surveys following guidelines recommended by the Service would be necessary to determine whether California gnatcatcher is present or absent.

Other special status birds potentially occurring on the site, either to breed or to forage, include burrowing owl (low probability, open places), long-eared owl (low probability, foraging only), loggerhead shrike (high probability, throughout), Bell's sage sparrow (low probability, shrubland), southern California rufous-crowned sparrow (low probability, shrubland). None of these species is listed as threatened or endangered under state or federal Endangered Species Acts or meets criteria for listing; instead, they are generally regarded as species of special concern by the California Department of Fish and Game (see Appendix 2).

Many migratory birds, including some special status birds, might use the site briefly during spring or fall; these include southwestern willow flycatcher, least Bell's vireo, yellow warbler, and yellow-breasted chat. Several sensitive raptors might forage over the site, particularly during winter, but do not nest on the site. These include white-tailed kite, northern harrier, golden eagle, ferruginous hawk, sharp-shinned hawk, Cooper's hawk, merlin, and prairie falcon.

Mammals: We conclude that no state or federally listed mammals occur on the project site. One listed species, San Bernardino kangaroo rat (*Dipodomys meeriami parvus*), is known from similar habitats in the region. San Bernardino kangaroo rats occur in alluvial fan and bajada habitats in pioneer to intermediate-aged shrublands associated with occasional flooding (McKernan 1997; see also Smith 1980 for discussion of vegetation succession). The site is outside designated critical habitat for San Bernardino kangaroo rat (USDI Fish and Wildlife Service 2002).

San Bernardino kangaroo rats occur only infrequently or not at all in mature shrubland habitats. Most extant occurrences are centered around Redlands, Devore, and San Jacinto, where large floodplain areas have not been converted to other land uses. Small extant populations and historic sites occur around the perimeter of basins in interior southern California, including the alluvial fan below Etiwanda Canyon, and at the bases of some hills within the basins (Reche Canyon, Jurupa Mts.). The nearest occurrences to Upland are just east of Slover Mtn. near the I-10 freeway and the Etiwanda alluvial fan (McKernan 1997, CNDDB 2003). The site is evidently west of the animal's geographic range. We conclude that San Bernardino kangaroo rat is absent from the site for the following reasons:

- There are no known occurrences in the Upland area, either recently or historically.
- The site is isolated by development and major roads from surrounding open lands.
- Remnant mature alluvial fan sage scrub vegetation on the site is only marginally suitable.
- The site meets only 2 of the 4 "primary constituent elements" of San Bernardino kangaroo rat habitat identified by the US Fish and Wildlife Service (2002). The site provides sandy or loamy soils and alluvial scrub or associated vegetation. But the site is not subject to flooding

processes or adjacent to land subject to flooding due to the long-term effects of the San Antonio Canyon dam upstream and channelization of San Antonio Creek, and its more recent isolation by the 210 Freeway and other surrounding land uses.

Special status mammals that could occur on the site include (see Appendix 2): San Diego black-tailed jackrabbit, San Diego pocket mouse, Los Angeles pocket mouse, southern grasshopper mouse, and San Diego desert woodrat. Also, several sensitive bats could use the site for foraging or roosting.

All are California Species of Special Concern (CDFG 2003b). All except Los Angeles pocket mouse are relatively widespread in southern California and do not meet criteria for state or federal listing. Los Angeles pocket mouse is poorly known, but apparently is nearly restricted to shrublands with sandy soils in the Inland Empire region (reviewed by Patten et. al. 1993). The California Dept. of Fish and Game (2003) indicates that it is known from fewer than 6 occurrences, but qualifies this ranking with a question mark. Its populations seem to fluctuate widely, and it probably spends winters in a state of torpor; thus, it may often go undetected even on sites where it occurs. Its limited geographic range, occurrence in habitats subject to extensive ongoing land use conversions, and poorly known ecology support its status as a Species of Special Concern. But the present state of knowledge does not meet criteria for state or federal listing. Los Angeles pocket mouse often overlaps in its distribution and habitat with the listed endangered San Bernardino kangaroo rat, and ongoing efforts to preserve this habitat will likely also favor long-term persistence of Los Angeles pocket mouse. While it may occur on the project site, the population would be isolated from other regional populations due to surrounding land uses and therefore would be unable to migrate into other habitat areas and unlikely to persist in the long term. Thus, if there is an on-site population, its loss would not be meaningful to conservation of the species and would not be significant in terms of CEQA.

PROJECT IMPACTS

Project approval and subsequent construction would result in removing all remnant natural vegetation from the site and converting the entire site to residential and recreational uses. Under CEQA Guidelines (California Code of Regulations 1999, sect.5065) a lead agency must conclude that a project would have a significant effect on the environment if any of the following would occur (italics added):

> (a) The project has the potential to substantially degrade the quality of the environment, *substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminage a plant or animal community, reduce the number or restrict the range or an endangered, rare, or threatened species*, or eliminate important examples of California history or prehistory.
>
> (b) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
>
> (c) The project has possible environmental effects which are individually limited but cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of probable future projects as defined in Section 15130 [of CEQA].

CEQA guidelines (section 15380) provide several definitions of endangered, rare, or threatened as they apply here, including listing as threatened or endangered under either state or federal Endangered Species Acts or meeting criteria for listing, quoted below:

(b) A species of animal or plant is:

(1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or

(2) "Rare" when either:

(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or

(B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.

(c) A species of animal or plant shall be presumed to be endangered, rare or threatened, as it is listed in:

(1) Sections 670.2 or 670.5, Title 14, California Code of Regulations [i.e., state Endangered Species Act]; or

(2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

(d) A species not included in any listing identified in subsection (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subsection (b).

Thus, a species need not be listed as rare, threatened, or endangered to meet mandatory criteria for significance in terms of CEQA, but its rarity or vulnerability to extinction must be similar to listing criteria under the state and federal Endangered Species Acts. These criteria are generally met for species included on the Fish and Wildlife Service's list of "candidate" species (formerly "category 1 candidates") or in special cases where new information becomes available (e.g., when a previously unknown threat is identified or when a species formerly considered extinct is rediscovered). Adverse impacts to other special status plants and animals (e.g., the Department of Fish and Game's "species of special concern," or many of the California Native Plant Society's "List 1B" plants) generally do not meet these mandatory CEQA criteria for significance, though local agencies may apply less stringent criteria in judging significance. Thus, impacts to "species of special concern," or "List 1B" plants may be considered significant by local criteria.

Impacts to Special Status Vegetation and Habitat

Project development would eliminate about 10 acres of mature alluvial fan sage scrub in the southeast corner of the project area, some smaller patches of coastal sage scrub in the triangular parcel near the western boundary, and any recovering coastal sage scrub within the former quarry area. although coastal sage scrub and alluvial fan sage scrub are considered special status plant communities, we conclude that this local loss would not be significant in terms of CEQA because the site is small, isolated from surrounding open space, and no longer subject to natural ecological processes (particularly flooding).

Impacts to Special Status Plants

No special status plants were observed during field surveys, but there is low to moderate probability that several could occur on the site. None is listed, proposed for listing, or a candidate for listing as rare, threatened or endangered. Impacts to any of these plants, if they occur on the site, would not meet CEQA criteria for significance.

Impacts to Special Status Wildlife

There is a low potential for several special status vertebrates to occur on the site. One of these, California gnatcatcher, is listed as threatened or endangered and meets CEQA significance criteria. None of the other species occurring or potentially occurring have formal status under state or federal Endangered Species Acts and adverse impacts generally would not meet the CEQA criteria for mandatory findings of significance.

POTENTIAL MITIGATION MEASURES AND MONITORING

Adverse impacts to California gnatcatcher, if it occurs on the site, would be considered significant in terms of CEQA. Impacts to other special-status plants and animals would not meet CEQA significance criteria, but several measures might reasonably be taken to minimize or mitigate impacts. These are listed below:

1. To prevent incidental "take" of California gnatcatchers or occupied habitat, we recommend carrying out formal presence / absence surveys, following guidelines recommended by the US Fish and Wildlife Service. If they survey concludes that California gnatcatchers occur on the site, then the applicant should consult with the US Fish and Wildlife Service under Section 10(a) of the Federal Endangered Species Act and prepare a Habitat Conservation Plan to mitigate loss of occupied habitat.

2. To avoid incidental killing of birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code, we recommend scheduling initial grading and brush removal of any previously undisturbred habitat outside the breeding season. We recommend that no vegetation removal should occur between early spring (15 March) and mid summer (15 July).

3. Burrowing owls take shelter in underground burrows, and would not fly off-site during initial grading and brush removal. While we did not observe burrowing owls on the site, they may occur in areas not covered by this field survey (particularly the disused sand and grave quarry). We recommend carrying out formal surveys to determine whether or not burrowing owls occur on the site and, if they occur, conducting "forced dispersal" at any occupied burrows prior to beginning brush removal or grading.

Mitigation monitoring: California law requires monitoring for mitigation measures imposed under CEQA. Compliance with the California gnatcatcher and burrowing owl survey recommended above could be verified by supplying a copy of the report describing the survey and its results and copies of correspondence with CDFG or US Fish and Wildlife Service to the Planning Department for approval prior to issuance of a grading permit. The grading permit should specify scheduling constraints for brush removal and initial grading, and these should be subject to enforcement action by the building inspector. The grading permit should also specify the requirement for forced dispersal of burrowing owls if they occur on the site.

CONCLUSION

CEQA requires the lead agency to reach findings regarding potentially significant impacts to biological resources. CEQA guidelines recommend addressing the six questions quoted below.

> Would the project:
> a) have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the

California Department of Fish and Game or U.S. Fish and Wildlife Service?

Some loss of suitable habitat for special status species would occur. One species (California gnatcatcher) would meet CEQA criteria for significance if it occurs on the site. Anticipated loss of other special status plants or wildlife would not be substantial and would not be significant in terms of CEQA. Incorporation of the mitigation measures described above would determine whether or not California gnatcatchers occur on the site and, if they occur, the ensuing consultation with the US Fish and Wildlife Service would result in a habitat conservation plan which would reduce impacts below a level of significance.

b) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The route would not cross any mapped perennial or ephemeral stream channel. Due to fencing and potential safety concerns, the former quarry site was not visited in the field, though it may hold some surface water and support ruderal riparian vegetation. Construction would likely eliminate any such vegetation thay may occur. Presumably, the planned city park would provide suitable replacement habitat in the form of ornamental trees. Construction would eliminate about ten acres of alluvial fan sage scrub vegetation, though this would not be a “substantial” loss due to its isolation from more significant regional open space areas.

c) have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hyudrological interruption, or other means?

No known impacts to jurisdictional wetlands would result from the proposed project, though it is possible that wetlands may occur in the bottom of the disused quarry area.

d) interfere substantially with the movement of 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.

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

White & Leatherman BioServices is unaware of any such conflict.

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

White & Leatherman BioServices is unaware of any such conflict.

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