Appendix D.4 Update to Biological Resources Report

September 17, 2015

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Biological Assessment Services

Subject: **Update to the Biological Resources Technical Report Dated August 17, 2011, Harvard-Westlake Parking Improvement Project, Studio City, CA.**

Ms. Lockwood,

In a Biological Resources Technical Report dated August 17, 2011 (Biological Technical Report), I described the existing biological resources within the Harvard-Westlake Parking Improvement Project (Project), potential environmental impacts, as well as recommended mitigation measures to reduce or avoid impacts to biological resources. This Biological Resources Technical Report Update Letter (Update Letter) was prepared at your request to update site conditions and the impact analysis based on revisions to the Project design and respond to general questions on the Project.

SURVEY METHODOLOGY

Biological surveys for this Project have been conducted in accordance with standard practice for determining the biotic character of the site to the level of detail satisfactory for environmental impact analysis as part of the environmental review process accompanying any proposed development in California. This includes assessing the habitats present and the potential presence of any sensitive biological resources. The level of effort is not intended to provide an exhaustive inventory of the biological resources present on the site, but to provide enough information that accurate conclusions can be drawn regarding the potential presence of sensitive biological resources. If the surveys indicate that further studies may be necessary to determine the presence or absence of a sensitive species thought to potentially occur on the site, surveys would be conducted in accordance with the established protocols for that resource. In general, regulatory agencies have agreed that when surveys are conducted in accordance with accepted protocols and have negative results, this constitutes “proof” that the resource is not present.

The Biological Technical Report and this Update Letter acknowledges that many of the species found in the Santa Monica Mountains may utilize the site and only the mountain lion and badger might not habitually use the site. The potential use of the site by sensitive bird species was evaluated based on the habitat present on the site. Habitats present on the site do not indicate potential presence of any avian species for which protocol surveys are required. Based on surveys conducted on the site, habitats that would support sensitive species for which protocol surveys are indicated (by applicable agencies such as USFWS and/or CDFW) do not occur on the site.

Inclusion of "Rare" Species in Analysis

The Biological Technical Report provides an enumeration of the categorizations of sensitivity assigned to biological resources and those analyzed in the document. In general species are addressed in the Biological Technical Report if they are included in any of the following:

- 15380(b) of the California Environmental Quality Act ("CEQA") Guidelines provides a definition of rare, endangered or threatened species that are not included in any listing.
- Plant and wildlife species listed as rare, threatened or endangered under the Federal or State Endangered Species Acts;
- Candidate species that may be considered rare or endangered pursuant to Section 15380(b) of the CEQA Guidelines.

Use of Department of Fish and Wildlife Protocol Surveys Not Required

As noted above based on site visits and my professional experience, no evidence of listed species (neither appropriate habitats, nor indications of species) were found on the site. Resource management agencies charged with reviewing the Project were provided copies of the NOP and Draft EIR and did provide comment that protocol surveys were necessary for this site.

Need for Camera Traps

As noted above, the potential occurrence on the site of any wildlife that occurs in the Santa Monica Mountains has been acknowledged. Camera trapping would only confirm the presence of species acknowledged to be present, or potentially present, on the site (deer, coyotes, etc.). Therefore, camera trapping is not necessary.

EXISTING CONDITIONS UPDATE

A follow-up site survey was conducted on March 18, 2015, to determine if there were any substantive changes to the biological conditions on the Project site or location of vegetation types since the initial surveys conducted in March 2011. In addition, a reconnaissance level survey was undertaken on July 29, 2015 of parcels added to the Project since the preparation of the Biological Technical Report (Development Site). The perimeter of the area mapped as disturbed was walked to determine if any additional incursions into natural areas had occurred. No additional natural areas have been disturbed in the four years since the first report. During the July 29, 2015 survey, it was noted that two houses on the site during the first survey are no longer present and most of the construction materials have been removed. There are a few remaining lengths of plastic pipe approximately 2' in diameter, a lowboy flatbed trailer, a cargo container, and some rolls of fencing still on the site.

Based on direct observations but without doing any measurements, it appears that the boundaries of the oak-walnut woodland and ruderal habitats are also consistent with those previously reported. No attempt was made to determine if additional trees had succumbed to thousand canker disease because, while reducing the number of trees present, the habitat designation would not have changed (the updated Native Tree Report, July 2015, provides information on the current condition of trees on the Development Site).

The biological conditions on the site are largely the same as in 2011. The weeds, especially hedge mustard, are larger and more widespread because the site is no longer being impacted by the activities associated with the storage of construction materials. The weedy vegetation still occupies the habitat areas noted as disturbed and ruderal on the habitat map in the Biological Technical Report. The increase in coverage of these weedy species is due to the filling in of the barren or unvegetated areas within the disturbed habitat area mapped.

One snake, the California Striped Racer (*Coluber lateralis lateralis*) was observed on the site but not noted in the Biological Technical Report because it was not observed during the initial site survey. The blue-gray gnatcatcher was noted in the Biological Technical Report as expected on the site and was observed on the July 29, 2015 site visit. These minor changes in conditions do not alter the existing conditions description presented in the Biological Technical Report.

IMPACT UPDATE

An update to Project design is included in this Update Letter evaluation. This update entails the addition of property to the site as well as the addition of a debris basin and the further separation of the retaining walls from the parking structure. These changes required an expansion of the Project footprint as illustrated on Attachment 1. The impacted area now includes 1.43 acres of Oak/Walnut Woodland (compared to 0.95 acres), 0.14 acres of ruderal habitat (compared to 0.12 acres), and 2.86 acres of disturbed area (compared to 2.79 acres). The final impact measured in acres of habitat is found in the revised Table 3.3-3 below. Attachment 2 to this Update Letter shows vegetation types on the site and the impact areas.

Revised EIR Table 3.3-3
Plant Community Impacts

Plant Community	Acres Present	Acres Impacted*
Southern live oak/southern walnut woodland	3.33 ac*	1.43
Offsite oak/walnut woodland	NA	0
Ruderal	0.34 ac	0.14
Landscaped/disturbed	3.16 ac	2.86

* Everything within the construction limit line, which includes a 15-foot clear area atop retaining walls as well as a ten foot buffer.

In addition, the updated Native Tree Report dated July 6, 2015 (the Updated Tree Report) identifies additional impacts to Southern California Black Walnut and Coast Live Oak as shown in the revised Table 3.3-4 below. The Updated Tree Report accounts for the additional parcels added to the site, which results in the inclusion of another 23 protected trees. In the Updated Tree Report, a total of 147 protected trees (including 15 trees that are deemed dead) would be removed (compared to 129), 134 Southern California Black Walnut (compared to 117) and 13 Coast Live Oak (compared to 12). In addition to trees removed, an additional six Oak trees and 14 Walnut trees would have minor encroachment onto the outer edges of the canopy drip line.

Revised EIR Table 3.3-4 Trees to be Removed by Type and Grade							
Species	No. of Species Surveyed	No. of Species Removed	Removal No. & % by Grade				
			A	B	C	D	F
So. Ca. Black Walnut	273	134	0 / 0%	3 / 2%	30 / 22%	88 / 66%	13 /10%
Coast Live Oak	65	13	0 / 0%	3 / 23%	6 / 46%	2 / 15%	2 / 15%
TOTALS	**338**	**147**	**0 / 0%**	**6 / 4%**	**35 / 24%**	**90 / 61%**	**15 / 10%**

The impacted footprint has increased since publication of the Draft EIR (from 3.96 acres to 4.43 acres).

See the discussion below regarding the revised impact assessment to sensitive species and habitats as a result of the increase in the impacted area, particularly the increased area of impact to oak-walnut woodland.

WALNUT WOODLAND HABITAT VALUE

Southern California Black Walnut Woodlands are a relatively rare habitat type that has a range limited to the coastal slope of the California coast and transverse ranges from central Santa Barbara County in the north to Central San Diego County in the south (Sawyer, J. 1995; Barbour, m. 1977; Anderson, E. 2002). Though this range encompasses most of coastal southern California, the distribution of the southern California black walnut is limited largely to north facing slopes and some deep canyons where conditions are relatively moist compared to more exposed slopes and flats.

Historically Walnut Woodlands have both important cultural and natural significance. The nuts were used by Native Americans as a food source that stores and transports easily. This food source is important to wildlife as it is present when other natural food sources are scarce. The production of walnuts is out of phase with the production of acorns on oaks, thus another food source is available when acorns are not being harvested. The very thick shell and thus relative storability of walnuts allows walnut seeds to be available to wildlife during times when resources are less available as the seeds may be intentionally stored by wildlife such as squirrels and birds or may just be found in the litter under the trees.

WALNUTS AND THOUSAND CANKER DISEASE

Approximately 78% of the walnut trees on the site were visibly infected with thousand canker disease. This disease causes nearly 100% mortality in infected trees, research indicates that the disease "causes mortality," implying that there is no significant survivorship after infection. First reported in Colorado (Tisserat, N.,et. al 2009) and thought to only infect black walnuts, the disease has spread throughout the U.S. and has been reported in Europe (Montecchio, L. 2014) and in other species such as white walnut and hickory. The trees infected with this disease have little long-term viability and thus their removal is not as significant as the removal of healthy trees. Additional information on pests and diseases affecting on-site trees is provided in the Updated Tree Report.

WALNUT MITIGATION AND CONSISTENCY WITH CITY ORDINANCE

Though many of the Southern Black Walnuts on-site are diseased and will likely die, the proposed mitigation measure treat each (live) tree as if it were healthy. As stated in the Updated Tree Report, "[r]emoval trees shall be mitigated for according to the City of Los Angeles Municipal Code 17.05 §R (4&5) as amended by Ordinance Number 177404, effective 4/23/06 (Tree Ordinance), and to the satisfaction of the City's Chief Forrester (Bureau of Street Services, Forestry Division), and the Board of Public Works. The Forestry Division will determine the final stock size and locations of mitigation plantings." Meeting the requirements of the City's regulations, by definition, has been previously determined by the City to provide adequate mitigation for the proposed impacts. The mitigation trees may or may not be planted onsite (at the discretion of the Forestry Division) and may be planted in another location that will benefit the people of the City enough to offset the Project's impact. In general, the most successful trees in terms of survivorship are those that are relatively small (one gallon deep pots for example), rather than larger trees. Planting them at a small size allows them to send out a long tap route and establish a root system that is most effective for long-term survival. The Tree Ordinance suggests a size of 24-inch box but allows that the Forestry Division will determine final stock size and location.

OAK AND WALNUT WOODLAND IMPACT SIGNIFICANCE AFTER MITIGATION

While the impacts to oak and walnut trees are to be mitigated in accordance with the Tree Ordinance, and thus by definition mitigated to a less than significant level by the City's standards, the replacement of individual trees does not immediately mitigate the loss of habitat. Oak and walnut woodlands are considered sensitive regionally and even at the statewide level. The loss of these habitats is already considered significant regionally and statewide. As discussed below, the loss of oak-walnut woodland onsite is considered to be a cumulatively considerable contribution to a significant impact with respect to loss of this resource.

ADEQUACY OF INITIAL SURVEY BASED ON POTENTIAL EXCESSIVE AMBIENT NOISE DURING SURVEY

Construction noise related to the new water line under Coldwater Canyon in the area of the Development Site is now complete and was not ongoing during any biological survey work for the Biological Technical Report. Similarly, the demolition of the two houses on the site occurred after the biological survey for the Draft EIR. Therefore, construction noise did not limit the opportunity to observe onsite wildlife. No construction noise was present at the time of the survey for the Draft EIR or the recent reconnaissance undertaken for this Update Letter; ambient noise was typical of a suburban neighborhood adjacent to a busy road. As noted in the Biological Technical Report and illustrated by photographs of some of the wildlife observed, the wildlife on the site appeared to be, at most, minimally affected by the noise levels present on the site.

LEVEL OF IMPACT TO SENSITIVE SPECIES AND HABITATS

As discussed above, reconnaissance level surveys by a professional, highly experienced, local biologist (the author of this letter) were undertaken on the site to determine whether more detailed protocol surveys for particular sensitive species were appropriate. The results of those surveys combined with knowledge of the area indicate that the San Bernardino ringneck snake and coastal western whiptail are the only sensitive species likely to reside on the Development Site (in the oak-walnut woodland habitat).

With mitigation, in particular replacement trees, impacts to oak-walnut woodland, and the associated impacts to sensitive species, may be reduced to a level of less than significance over time. However, since the time frame for reducing impacts is uncertain, and the acreage of replacement habitat is unknown, the impacts noted above, all related to the loss of oak-walnut woodland habitat, are conservatively considered significant, and unavoidable.

In summary, conservatively, impacts to sensitive species and habitats are as follows:

- *San Bernardino ringneck snake and coastal western whiptail.* Conservatively, the potential for impacts to these species is considered to be a potentially significant Project impact as a result of the loss of 1.43 acres of the oak-walnut woodland habitat.

- *Other Sensitive Species.* Other sensitive species (primarily birds) found in the area may utilize the site on occasion or during migration but are not anticipated to be directly impacted. The direct loss of any sensitive species would be considered significant under CEQA; however, most sensitive species with the potential to occur on-site are expected to move away from construction activity and no direct impacts are anticipated (with the exception of the ring necked snake and coastal western whiptail). The indirect negative effect of habitat removal on sensitive species is considered a cumulatively considerable contribution to a significant impact on these species region-wide as a result of the loss of 1.43 acres of oak-walnut woodland.

- *Oak-Walnut Woodland.* As noted above, given the increased area of disturbance and additional removal of established oak-walnut woodland habitat compared to that assessed in the Biological Technical Report, the updated Project is considered to result in a cumulatively considerable contribution to a significant impact with respect to loss of the sensitive oak-walnut woodland habitat. It is noted that much of this habitat is severely degraded as a result of the thousand canker disease in the walnuts, and loss of many of the trees is likely even without the Project. It is not clear how nature would replace these trees on this site. The analysis herein conservatively assumes that the loss of the habitat on-site is attributable entirely to the Project; no accounting of removed habitat value and replacement habitat value has been taken in to consideration, resulting in a conservative assessment of impacts.

USE OF ORNAMENTAL AND RUDERAL VEGETATION BY WILDLIFE

It is not common practice in scientific journalism or in the field of environmental documentation to cite statements that are universally accepted biological tenets. Species acclimated to urban and suburban habitats use urban and suburban habitats. Page 22 of the Biological Technical Report notes some of the more common species that are acclimated to the suburban environment. “Among the native members of the southern California fauna known for their ability to thrive near human habitation are the southern alligator lizard, coyote, raccoon, striped skunk, and several bird species including the northern mockingbird, mourning dove, scrub jay, bush tit, and house finch.”

If a species of conservation concern were dependent on ruderal or ornamental habitat types, the species would have abundant habitat and would not be a species of concern. To further support this conclusion, the U.S. Census Bureau, therefore, states there are over 3.2 million households in Los Angeles County (2013). If we assume that each of these households has some sort of nonnative ornamental landscaping (some shared in the case of apartments and condominiums) it is obvious that ornamental landscaping is abundant in the region, or conversely, is not a limited resource for those species that utilize these habitats. Therefore, loss of 2.86 acres of landscaped/disturbed and 0.14 acres of ruderal area would not comprise a substantial impact on species in the area.

EFFECTS OF NIGHT LIGHTING ON WILDLIFE

The EIR indicates the following regarding night lighting: “The athletic field would be at an elevation of approximately 755 feet AMSL. Light poles would extend approximately 39 feet above the field level (up to approximately 84 feet above ground level; or approximately 794 feet AMSL) and would be painted green to blend with the surrounding foliage. The Development Site is somewhat screened by topography and vegetation from the Coldwater Canyon Open Space (which ranges in elevation from 660 feet AMSL to 1,115 feet AMSL); similarly, lighting on the Development Site would be somewhat screened from the designated Scenic Corridor by intervening dense vegetation. However, a glow from the lighted athletic field would be visible from the adjacent Coldwater Canyon Open Space and the Scenic Corridor located 34 feet south of the Development Site.” A lighting map, Attachment 3 is provided in the RDEIR (a similar map was included in the DEIR) and was used to evaluate the potential impacts of the proposed project on wildlife.

The evaluation of the biological impacts of night lighting on the wildlife on site and in the vicinity is based on the above description. As stated in the Biological Technical Report: “Night lighting may be detrimental to animals in nearby natural areas for a variety of reasons. These include disruption of circadian rhythms and avoidance due to light sensitivity in species with exceptional night vision. Some insectivorous species benefit from night lighting because it attracts and concentrates large numbers of insects for feeding purposes. However, the typical net effect of lighting is that adjacent areas are utilized by wildlife to less than their fullest extent.”

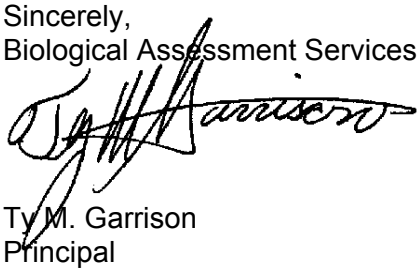
The lighting proposal for the Project includes most of the mitigation measures ordinarily proposed to decrease the effects of night lighting on wildlife to a less than significant level. As the Project is designed, there is one exception to the standard measures. The light poles are higher than would be recommended to reduce the spread of light into the surrounding natural areas. However, based on the lighting impact map, none of the natural areas that would remain would be subject to direct lighting from the field. The lighting analysis acknowledges that indirect lighting, i.e. “a glow” would be visible from much of the surrounding area. Given the suburban nature of the Development Site, it is expected that wildlife in the region are accustomed to the glow of city lights and would not be significantly impacted by the additional lighting. Some of the nocturnal wildlife remaining on the site may be adversely affected by the field lighting, but based on the limited spill of the lighting, restricted hours of lighting (to 8 pm on weekdays), and the small area that would be affected, that impact is not considered significant.

EFFECTS OF NOISE ON WILDLIFE

Noise from Project construction would result in elevated noise levels in adjacent areas. Noise from Project operation (cars internal to the structure and children practicing on the practice field would result in noise on adjacent areas. Similar to impacts related to increased lighting, given the suburban nature of the site, especially given the high traffic levels on Coldwater Canyon, it is expected that wildlife in the region are accustomed to urban noise. The increased noise from construction would likely cause birds and mammals to temporarily forage away from the site. Operational noise may cause some wildlife to forage away from the site during noisy periods, but in general most species that currently use the site would return. Therefore, while temporary construction noise and long-term operational noise would adversely impact on-site and adjacent wildlife, impacts would be less than significant because wildlife using the area is already acclimated to urban noise.

As always it is a pleasure working with you, and if you have any questions please call.

Sincerely,
Biological Assessment Services



Ty M. Garrison
Principal

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Ty M. Garrison

Education

M.S., Plant Ecology, California State University at Long Beach, 1991

B.S., Biological Sciences, University of Redlands, 1981

Experience

Mr. Garrison has over 33 years of experience in the application of environmental principles and regulatory requirements to the planning process. He has worked closely with both private planning firms and public planning agencies on projects ranging from simple lot splits to large master-planned developments. His recent experience includes major public projects (railroad and highway improvements) and utilities (various pipelines, cellular communications towers, and fiber optic communications lines).

As an environmental permitting specialist, Mr. Garrison has developed effective working relationships with local, state, and federal agencies throughout southern California. He has also participated in land use planning and development decisions for many communities in southern California, including developing specific plans and general plans, analyzing open space environmental constraints and wildlife corridors, and planning in environmentally sensitive habitats.

Mr. Garrison is a member of the Los Angeles County Significant Environmental Area Technical Advisory Committee (SEATAC). In accordance with LA County General Plan, the SEATAC reviews all proposed development that may affect any of the identified Significant Ecological Areas in the County. The SEATAC holds public meetings to discuss the projects and provides technical guidance to the project applicants, the County Planning Commission, and the County Board of Supervisors.

Mr. Garrison also served as a member of the Oak Woodlands Habitat Conservation Strategic Alliance (Alliance). In accordance with the California Oak Woodlands Conservation Act (AB 242), Los Angeles County (County) was required to develop an Oak Woodlands Conservation Management Plan (Plan) in order to qualify for funding to preserve oak woodlands through the Oak Woodlands Conservation Fund. The Alliance, which consisted of a respected group of biologists, arborists, environmentalists, foresters, planners, Building Industry Association (BIA) representatives, and academics that were chosen to develop the plan for the County. The Alliance, which represents a significant and unprecedented collaborative effort, donated over 5,000 volunteer hours and completed the Plan in May 2011.

Educating and mentoring young biologist and environmentalists, as well as the general public, has always been a gratifying component of Mr. Garrison's career. Having the opportunity to teach Environmental Law, Policy, and Regulation at Whittier College as an adjunct professor was a fulfilling expansion of Mr. Garrison's desire to share his knowledge and experience regarding the environment and our place within it.

In addition to the pre-project surveys, documentation and permitting expertise, Mr. Garrison has extensive experience implementing the plans, measures, and conditions placed upon a project. Mr. Garrison has monitored numerous construction projects for all aspects of environmental compliance including adherence to SWPPP measures, biological resource monitoring and reporting during construction and operation, wildlife relocation, site restoration, and agency reporting.

Illustrative examples of Mr. Garrison's relevant experience follow:

Biology Subject Matter Expert (SME), Southern California Edison, Devers to Colorado River Transmission Line Project.

The Devers to Colorado River transmission line project consisted of the construction of 154 miles of 500kv transmission line that, despite the title, spanned the distance from the Colorado River to the Valley Substation near Hemit CA. The project is designed to conduct power from the burgeoning renewable energy projects in the desert to SCEs local distribution system. The project included the development of two new substations and nearly 1000 towers. Mr. Garrison provided review and revision of various previously prepared resource management plans, liaison with resource management agencies (BLM, FWS, CAFWS, CPUC, etc.), and management of the biological consultant's team of field biologists. As part of the natural resources management team for the project Mr. Garrison was specifically charged with managing the biological monitors for the 111 mile segment from the Colorado River to the Devers

Substation in Desert Hot Springs CA. This duty included but was not limited to insuring compliance with all permit conditions, reviewing daily monitoring reports, communicating with resource agencies when protected species were encountered, and investigating impacts to sensitive resources.

Permitting and Environmental Documentation for Fiber Optic Network, Level 3 Communications, (CA and NV)–Permitting and CEQA Documentation Manager

The Level 3 Communications project consists of environmental and right-of-way permitting for the construction, operation, and maintenance of a buried fiber optic cable that is part of a nationwide long-haul communications network. Duties included biological resource surveys, Biological Assessment preparations, biological permitting, and construction monitoring. The project traversed seven counties and three states. Biological permits and agreements required included Federal Endangered Species Act Section 7 Consultations, State Endangered Species Act 2081 Take Permits, Clean Water Act Section 404, 401, 202(p) Permits, California Fish and Game Code Section 1603 Agreements and many local and regional compliance issues Mr. Garrison also oversaw preparation of CEQA documentation for in-line amplification sites along those routes. The California portions of these routes include many sensitive biological and cultural/historical resources, and require approval of the California Public Utilities Commission. The permitting process and environmental documentation have involved Mr. Garrison's extensive and intensive coordination, consultation, and negotiation with the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), the U.S. Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and the U.S. Army Corps of Engineers (USACE).

Mr. Garrison's involvement in the southern California portion of the project began at the design stage and continued through construction completion. The first assignment was to select several potential routes and evaluate their levels of environmental sensitivity. In many areas this required conducting directed surveys for rare, threatened or endangered species. Mr. Garrison then directed the preparation of the Biological Assessments and the biological portions of the Environmental Assessments for each line. While negotiating the permits described above, Mr. Garrison initiated the development of several environmental training programs for construction workers and biologist that would be working on the project during construction. The project eventually required 128 biological monitors onsite during construction and all construction workers required environmental awareness training. Biologist training educated biologist from outside the region on what sensitive species occur in the area and when and where they were likely to be encountered along the project route. One training program allowed biologist to be authorized by the FWS to handle the Endangered desert tortoise. As FWS, CDFG, and BLM designated project biologist Mr. Garrison was responsible for overseeing biological monitoring and reporting to the permitting agencies through the conclusion of construction.

Avian Specific Work Experience

Mr. Garrison has conducted hundreds of biological surveys that included general assessment of avian resources and bird species noted within the project area. He has also conducted nesting bird surveys for dozens of small projects throughout southern California. These surveys were designed to locate and identify existing bird nests prior to the onset of project activities in order to provide protection for the birds and their nests. One of the largest of these projects included 400 acres of high desert land in the Antelope Valley that was slated for construction of a sewage treatment plant. Mr. Garrison and his team located all of the nests within, and adjacent to, the action area and placed construction buffers around the nests as required by CDFW. On a related project Mr. Garrison and his team surveyed thousands of acres of high desert land and in the Antelope Valley for bird nests in preparation for agricultural conversion using reclaimed water. The land had been farmed in the 1930s but had been fallow since, allowing some desert flora recruitment and subsequent faunal establishment. One major component of this project was the location of burrowing owl burrows and the construction of artificial burrows so that the owls could relocate to the new burrows when the old, concrete-asbestos, irrigation pipes that the owls had been using were removed.

Additionally Mr. Garrison has supervised teams of biological and avian monitors on large construction projects such as the SCE transmission line described below. On that project part of Mr. Garrison's duties included interacting with resource management agencies regarding potential impacts to nesting birds as a result of construction activities. One of the primary duties in that regard was to formulate reasonable requests for nest buffer reductions when warranted by the proposed construction activity and the species of

bird and nest location, among other factors. Other duties included determining the course of action when required to rescue birds in distress and reporting on avian mortalities. Most of the avian mortalities were a result of collisions with transmission lines but one eagle was killed by a collision with an adjacent wind turbine.

Mr. Garrison has held a California gnatcatcher recovery permit but he has allowed that permit to lapse because he was not actually conducting California gnatcatcher surveys, but was hiring or supervising others to conduct those surveys.

Base Realignment and Closure (BRAC) Studies

As part of the BRAC process Mr. Garrison conducted several on Camp Pendleton to support the realignment of troops and support from other locations. Included in these studies were a hangar firefighting system cleanup and disposal study that included the design of a several mile long storage/disposal pipeline between MCAS Camp Pendleton and the nearest treatment plant. Mr. Garrison also conducted numerous feasibility studies involving the demolition or reuse of facilities on the Station. These studies included the evaluation of potential human impacts of hazardous materials and the potential to impact several sensitive wildlife species in residence adjacent to the Station.

Environmental Documentation for Regional Communication System (RCS), San Diego County (CA)

Prepared environmental documentation for five new telecommunication sites in San Diego County. The project is part of a larger system of improvements to the County's RCS that are needed to eliminate areas in the County from which radio communication is impossible, and to provide a radio system that allows communication between all of the emergency service providers in the area. Prepared agency notifications, public notification, Application for Environmental Initial Study, Environmental Initial Study/Negative Declaration, CDFG De Minimus form (Certificate of Fee Exemption), Notice of Completion, Notice of Determination, and Public Review Release Form. Several of the sites also required the preparation of a visual and aesthetic analysis in accordance with guidelines of the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans).

As-Needed Environmental Services, City of San Diego (CA)–Senior Biologist

As senior biologist and environmental scientist, directed staff and directly assisted City engineers on 19 projects. Conducted general biological resource assessments and sensitive species surveys and obtained environmental permits. In Penasquitos Lagoon, monitored the emergency repair of a broken sewer main and negotiated the following resource permits for the project: 404 Permit (USACE); 1601 Agreement (CDFG); Temporary Use Permit (California Department of Parks and Recreation); and a Coastal Permit (California Coastal Commission). A large fine threatened by the EPA was avoided due to Mr. Garrison's efforts. He also prepared the mitigation and revegetation plan and mitigation monitoring plan for the project. At Adobe Falls, he conducted an impact analysis for sewer line access road construction, which required general biological surveys and focused California gnatcatcher surveys and sensitive plant inventories. Mr. Garrison had similar duties on the remainder of the projects completed as part of this contract.

As-Needed Biological Services for San Diego County Department of Public Works (CA)–Senior Biologist

As senior biologist and environmental scientist, conducted biological survey and monitoring for five County projects. For the Dehesa Road culvert replacement, directed California gnatcatcher surveys and wetland delineations. For the Central Avenue Bridge replacement, supervised the relocation of mature trees, construction monitoring (environmental), and revegetation monitoring. For the Bonita Bridge replacement, monitored construction and revegetation. For the Kitchen Creek Bridge replacement, prepared a revegetation plan and monitored Revegetation. For the Spring Valley Sewer Outfall mitigation monitoring project, significantly modified an existing revegetation plan and monitored revegetation.

Resource Management Plan (RMP) for Montgomery Field, San Diego (CA)

Prepared the RMP for Montgomery Field (a general aviation airport) in the manner approved by the USFWS and agreed to by the USACE, the CDFG, and the City of San Diego. The purpose of the RMP was to inventory the biological and cultural resources existing within the airport boundaries and to

immediately protect potentially significant areas from accidental disturbance. The RMP was crafted to protect and enhance (where possible) substantial resources while meeting safety criteria of the Federal Aviation Agency (FAA) and maintaining airport operations. The RMP was written as a "living document" that will allow airport operations, construction activities, and natural resources to evolve together over the years to come. As negotiated with the USFWS, the precise contents of the RMP were not finalized until there was a clear understanding of the existing biological resources at the Airport. Once the report elements were finalized, a preliminary draft RMP was prepared that includes a discussion of biological and cultural resources issues and detailed specific construction monitoring actions for the first five years of the program.

China Lake Naval Weapons Station Revegetation Test Program, CA

China Lake encompasses many different habitat types that are subjected to a wide range of disturbances including explosive detonations, vehicle maneuvers, and fire, among others. The program was designed to develop revegetation strategies for the range of habitats and disturbances encountered.

City of Carlsbad Habitat Conservation Plan, CA

Prepared habitat conservation plan to compensate for projected impacts of the City of Calrlsbad's proposed public golf course. Golf course development would impact wetland and riparian, native grassland, and coastal sage scrub habitat. These habitats are occupied by numerous sensitive species including the Threatened California gnatcatcher. The habitat conservation plan proposed preservation and restoration of the full compliment of locally native habitats located around city-owned Calavera Lake. Much of the native habitat around Calavera Lake had been disturbed by agriculture, non-native species invasion, off-road vehicle activity, and illegal dumping. Methods proposed to restore the site included topsoil salvage and relocation from the impact site, non-native species removal, and native species reintroduction. A long-term management plan that included vehicle exclusion, maintenance, and monitoring was also developed.

City of Glendora Forensic Environmental Documentation

While conducting biological surveys on the Hughes property at the northern terminus of Loraine Ave. in 1989, Mr. Garrison discovered a population of the Endangered thread-leaved brodiaea (*Brodiaea filifolia*). The species had not been previously documented in the area except by one cryptic reference to a location in the "foothills above Glendora" from 1926. The new discovery eventually led to the establishment of a park and preserve on the site. Subsequently Mr. Garrison conducted surveys on other properties in the Glendora foothills and discovered other populations of the species. The most notable population was located on and adjacent to Guard Ranch, in the vicinity of what is now known as Gordon Highlands Road, Ferguson Motorway, and Wildwood Motorway. This discovery and subsequent negotiations led to the permitted development of "Guard Ranch" now called Gordon Highlands, with conservation easements for the Brodiaea.

Many years later, Mr. Garrison was asked by the City to prepare a detailed account of the permitting history and subsequent permit condition violations on the Guard Ranch property. After detailed and exhaustive research, the resulting tome was submitted to the City for their use.

Section 1600 and/or Section 404, CA

Delineated areas sensitive due to Section 1603 (California Fish and Game Code) and/or Section 404 constraints on numerous projects in Southern California. Assessments involve a practical knowledge of EPA/ACOE wetland determination criteria, including soil sampling, vegetation analysis, and hydrological data interpretation.

General Biological Resource Assessments

Conducted more than 100 general biological resource assessments of parcels in size from less than one acre to more than 10,000 acres. Assessments involve identification of any sensitive species or resources potentially occurring on the project site, field investigations, assessments of project impacts to natural resources, and proposal of measures to mitigate project impacts.

Oak Tree Surveys, CA

Conducted oak tree surveys in accordance with the standards of many Southern California municipalities. Studies have ranged in size from four to over 6,000 trees.

Transplant Programs, CA

Performed two transplant programs involving the relocation or rare plants *(Dudleya multicaulis, Brodiaea filifolia)* from development sites to designated open space locations.

Endangered Species Assessments, CA

Conducted many assessments involving rare, threatened, and/or endangered species. Studies involved habitat assessments, field identification of species, impact determinations, mitigation development, and agency coordination.

Discovered previously unrecorded populations of the State Endangered thread-leaved Brodiaea *(Brodiaea filifolia)* in the foothills of Glendora.

City of Adelanto General Plan, CA

Developed general plan guidelines for the newly incorporated City of Adelanto. Guidelines included the preservation of major natural drainage courses, wildlife movement corridor/habitat linkage protection, and Endangered and sensitive species habitat preservation.

City of Mission Viejo, CA

Developed guidelines for the use of undeveloped open-space areas in the City of Mission Viejo.

Microecological Investigations, CA

Conducted several investigations on the effect of minor microecological variations on both floral and faunal community structure.

Thousand Pines American Baptist Outdoor Center, CA

Designed, supervised, and constructed three miles of hiking trails at Thousand Pines American Baptist Outdoor Center in the San Bernardino Mountains. Authored and illustrated trail guidebook emphasizing ecological awareness.

Professional Endeavors

Biological Assessment Services – Full time 2010 – Present.

SEATAC

Los Angeles County Significant Ecological Area Technical Advisory Committee – 2003 - Present

SWCA Inc. - 2009-2010

Land Design Consultants – 2001-2009

HDR Engineering, Inc. – 1998-2001

P&D Consultants – 1994-1998

Biological Assessment Services, Owned and Operated – 1990—1994 Present; Part Time 1994 - 2010

The Planning Center – 1988-1990

Michael Brandman Associates – 1986-1988

LSA Associates – 1985

Independent Consultant – 1982 - 1985

Professional Affiliations

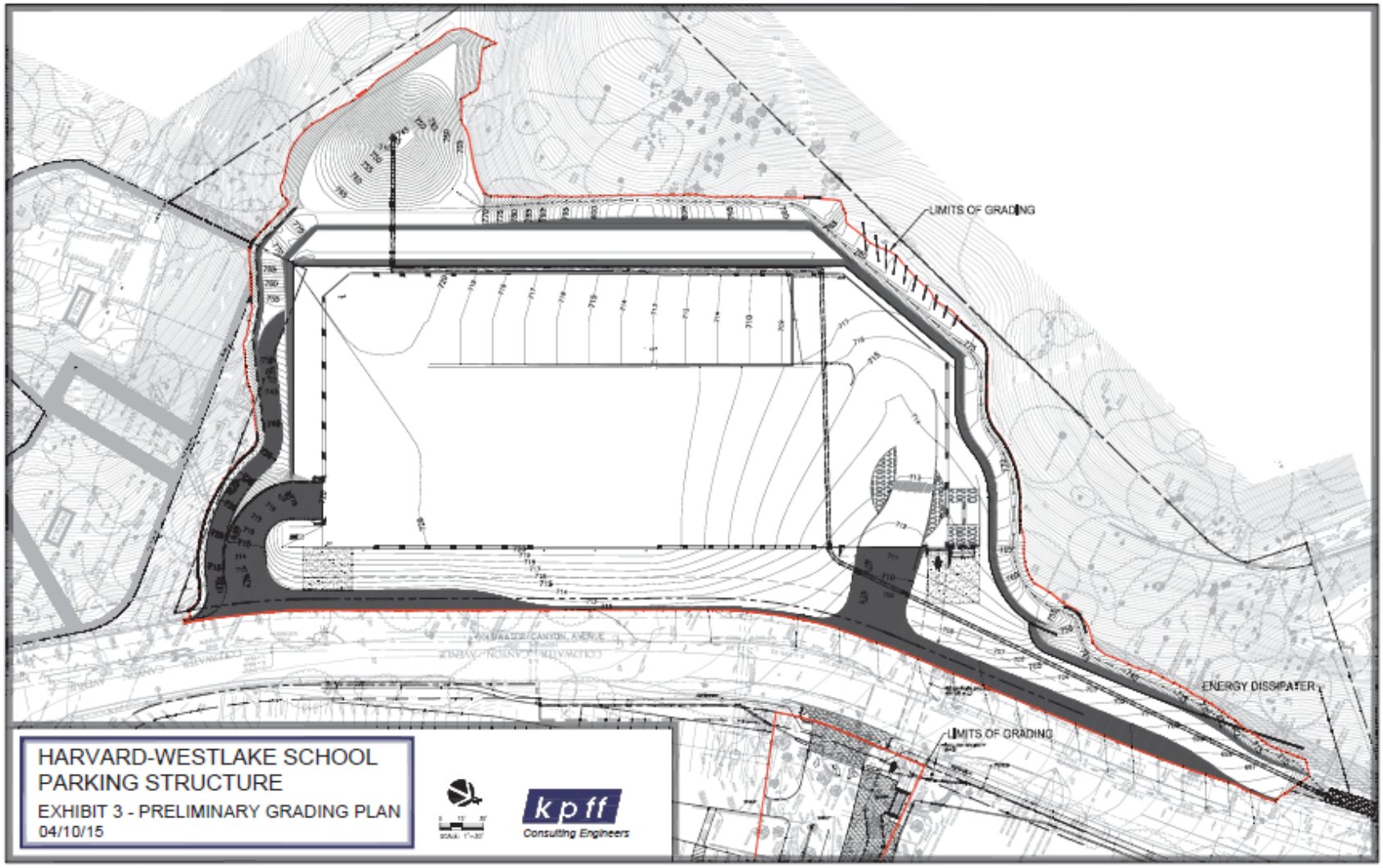
California Native Plant Society

California Oak Foundation

Publications

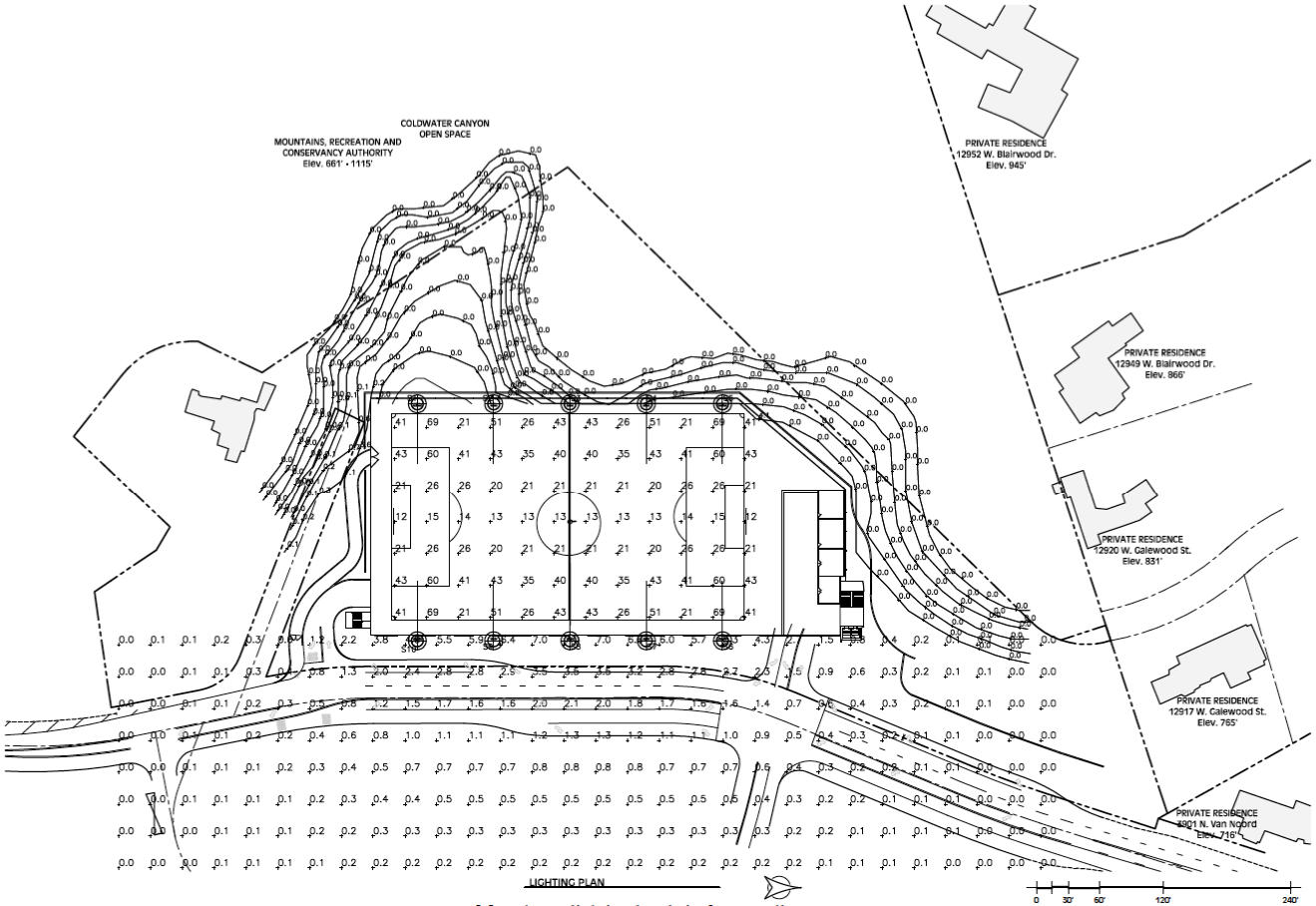
Seasonal Dormancy in *Dudleya parva* (Master's thesis)

Attachment 1: Grading Impacts Map



Attachment 2: Vegetation Impact Map

Attachment 3: Lighting Map



Map shows lighting levels in foot-candles.

SOURCE: IDG Parkitects, Inc., Musco Sports Lighting, LLC

Harvard-Westlake Parking Structure ■

Figure 3.1-26
Lighting Map