APPENDIX B Biological Technical Report

GRIFFITH PARK PERFORMING ARTS CENTER Biological Resources Technical Report

Prepared for City of Los Angeles Department of Recreation and Parks December 2013





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Griffith Park Performing Arts Center Biological Resources Technical Report

Executive Summary

The City of Los Angeles Department of Recreation and Parks (RAP) proposes to develop a 45 square foot open air outdoor stage on an existing grass area of Griffith Park known as the Old Zoo; an area that currently hosts several regular annual events.

A field reconnaissance of the Griffith Park Performing Arts Center Project (Project) was conducted by Environmental Science Associates (ESA) on November 19, 2013to gather baseline data on the existing condition of biological resources on and surrounding the Project site. During the reconnaissance, a biologist characterized and mapped plant communities, all onsite and adjacent drainages and riparian areas, and recorded observations of plants and wildlife species.

No native plant community or habitat occurs on the Project site. Vegetation on the site is characterized as ornamental landscaping, consisting of a manicured lawn with scattered native and non-native trees, including natives such as California sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), and California bay laurel (*Umbellularia californica*), and non-native trees such as red river gum (*Eucalyptus camaldulensis*) and Peruvian pepper tree (*Schinus molle*). The remainder of the Project site is developed consisting of existing paved or dirt walkways and park facilities such as an existing restroom and picnic benches. However, the Project site is surrounded by coast live oak woodland that is interspersed with Old Zoo facilities such as walking paths, animal enclosures, and zoo buildings (grottos) and disturbed coast live oak woodland surrounding the lower picnic area in the eastern portion of the Project site.

There is an intermittent stream in Spring Canyon 15 feet west of the Project site, which supports a Southern Sycamore Alder Riparian Woodland, a California Department of Fish and Wildlife (CDFW) recognized sensitive natural community. Measures are recommended to avoid impacts to water quality that include use of best management practices (BMPs), which would reduce potential impacts to less than significant. Many species of birds are expected to nest in the trees within and surrounding the Project site. Measures are recommended to avoid direct impacts to birds during the nesting season that include preconstruction surveys and "no construction" buffers in the event that nests are discovered. The grassy area and disturbed/undisturbed coast live oak woodland may provide habitat for foraging bats; however, no maternity roosts are expected to be in the vicinity of the project, and the project will not remove any mature trees that could theoretically be used by bats for roosting. Nonetheless, measures are recommended during the construction phase that include limitations to nighttime lighting to avoid excessive light spillage onto adjacent areas, and preconstruction surveys. The coast live oak woodland also provides

habitat for special-status reptiles, including silvery legless lizard (Anniella pulchra pulchra), coastal whiptail (Aspidoscelis tigris stejnegeri), and coast horned lizard (Phyrnosoma blainvillii). Measures are included to avoid inadvertent impacts to sensitive reptile species (as well as all common terrestrial species) that include a Worker Education Awareness Program to educate construction workers on the life history, habitat, and identification of these species and preconstruction surveys and removal of individuals off of the Project site. The undisturbed woodland adjacent to the project site has the potential to support a variety special-status plant species such as mesa horkelia (Horkelia cuneata ssp. puperula) and Plummer's mariposa-lily (*Calochortus plummerae*). Measures are included to avoid impacts to special-status plants including staging vehicles and construction equipment away from undisturbed woodlands. Tree species protected by the City of Los Angeles Protected Tree Ordinance and the RAP Tree Preservation Policy, including coast live oak and California sycamore. Measures to avoid impacts to the protected tree species include surveying of the site by a qualified arborist, who will make recommendation to avoid impacts to protected trees. Finally, wildlife may use the undisturbed habitat surrounding the Project site as a movement corridor. Measures to reduce impacts to wildlife movement includes directing night lighting downward and using lighting only when events are scheduled.

Griffith Park Performing Arts Center Biological Resources Technical Report

1. Introduction

This report analyzes impacts to biological resources that would result from construction and operation of the Griffith Park Performing Arts Center (Project). Below is a description of the Project, relevant laws regulating biological resources in the region, the existing environmental conditions within the Project footprint and surrounding areas, and identification of potential impacts to biological resources that may result from implementation of the Project. Mitigation measures are recommended to avoid or reduce potential impacts to a less than significant level.

2. Project Location and Description

The City of Los Angeles Department of Recreation and Parks (RAP) proposes the development of a permanent open air outdoor stage on an area of Griffith Park that currently hosts Shakespeare in the Park, the Los Angeles Haunted Hayride, and Symphony in the Glen. The Project site is located at 4730 Crystal Springs Drive, and is entirely within Griffith Park in the City of Los Angeles; approximately 15 miles northwest of downtown (see **Figure 1**). Griffith Park lies just west of the Golden State Freeway (Interstate-5 [I-5]), roughly between Los Feliz Boulevard on the south and the Ventura Freeway (State Route [SR] 134) on the north. Freeway off-ramps leading to Griffith Park from I-5 are Los Feliz Boulevard, Griffith Park (direct entry) and Zoo Drive. The Project site is within the "Old Zoo" area of Griffith Park, and its location relative to other Griffith Park uses is shown in **Figure 2**.

The Project would include the construction of an outdoor performing arts stage and associated improvements as discussed in more detail below (see **Figure 3**). The Project would be constructed in two phases: Phase 1 would be complete by June 2014 and includes development of the stage, undergrounding of existing utility lines, renovation of existing restrooms, installation of lighting, and ADA picnic and viewing areas, and Phase 2 would be completed by June 2015 and includes an ADA pedestrian bridge, improved ADA paths, path lighting, refurbishment of existing stairs, and ADA parking improvements.



Griffith Park Performing Arts Center . 130367.02 Figure 1 Project Vicinity Map

SOURCE: ESA, 2013



SOURCE: ESA, 2013



The proposed stage dimensions would be 45 square feet with chamfered corners. The stage would be oriented to the west and open unreserved seating would be available in the existing maintained lawn area; no permanent seating would be installed. The Project would also relocate two existing concrete picnic bench pads within the lawn to accommodate the stage and provide optimal viewing areas for visitors.

Electrical connections would be provided, but no sound permanent amplification equipment or speakers would be installed as part of the project. An electrical switchboard would be constructed in an undeveloped dirt area just to the east of the stage and the existing road. An existing LADWP power line that currently runs through the project site will be repositioned underground. In support of the project, LADWP will remove three overhead utility poles and connecting lines and will install the new lines underground, which will extend approximately 600 feet within the existing pedestrian pathway that encircles lawn area. Trenching would occur along this route and would be an estimated two feet wide by four feet deep. Excavation of pads for two new poles would occur as well.

Existing restrooms (constructed in 1989) would be upgraded for ADA compliance. This would include removal of the existing countertops and four sinks and installation of new accessible fixtures and correct height counters; installation of new grab bars and accessories in the two accessible stalls; installation of new accessories in the remaining five stalls; sandblast and painting of the exterior; and repainting of the doors, frames, and louvers.

Existing unmarked parking is provided in an unpaved and damaged access road north of the site. There is currently capacity for an estimated 30 parking spaces provided, including one faded ADA stall. The parking area would be resurfaced with permeable pavers and an asphalt drive aisle, and striped up to an existing turn-around area and gate. Striping for approximately 20 standard parking stalls and up to six ADA stalls would be conducted.

Lighting fixtures would be installed solely to provide safety and security and would be in a rustic or rural style in keeping with the existing aesthetic of the Old Zoo area and Griffith Park in general. Lighting would be consistent with the use of the space per individual event permits (all lighting is currently provided by user groups). Lighting would not be on when the proposed Project is not in use. Lights will be set to timers for shutoff and permitted users would also have the ability to turn lights off manually. Light emitting diode (LED) lights would be used for low power consumption and longer life within dark sky light fixtures. The light fixtures would be installed along the eastern part of the lawn area and along the resurfaced pathway. Any temporary lighting used for the performances and special events would be supplied by the permittee, if needed, as is the current procedure.

Phase 2 of the project would include a new prefabricated modular ADA bridge to connect the resurfaced ADA parking area to the lower picnic area and stage area. The aboveground bridge would turn into surface path, and would include hand rails and lighting. The bridge would vary in height due to the topography and would be no more than eight feet above grade measured to the bottom of the bridge (not the walking surface). The bridge would be composed of steel (COR-

TEN). Phase 2 would also include resurfacing (leveling) the existing uneven small network of walking paths with decomposed granite (DG) and installation of ground level lighting.

The proposed project has been designed to accommodate the existing annual events that occur on the project site; namely Shakespeare in the Park, which has the highest regular event attendance at roughly 2,500 visitors. These events would continue to operate as they have traditionally, but with improved viewing capabilities, set up and breakdown abilities for performers, and improved safety and ADA access. Additional future events could be held at the facility, and would be required to secure an event permit with the City of Los Angeles as under current procedure. RAP knows of no other potential events at this time and would consider each event on an individual basis. While the current known events that are held at this location do not use sound amplification, it could be used in the future if it meets Municipal Code requirements. The facility would be required to meet operational regulations of the rest of Griffith Park, and would operate from 6:00 a.m. to 10:00 p.m.

3. Regulatory Framework

The Project is subject to federal, state, and local regulations regarding biological resources. A summary of the regulations pertaining to the proposed Project is provided below.

3.1 Federal

Federal Endangered Species Act

Under the federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC 1533(c)). Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed or proposed species may be present in the project region and determine whether the proposed project would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536(3), (4)). Project-related impacts to these species or their habitats would be considered "significant." Section 7 of FESA contains a "take" prohibition which prohibits any action conducted, funded, or approved by a federal agency that adversely affects a member of an endangered or threatened species without prior formal consultation with the United State Fish and Wildlife Service (USFWS). Formal consultation with the USFWS would result in the issuance of a Biological Opinion (BO) that includes either a jeopardy or non-jeopardy decision issued by the USFWS to the consulting federal agency. The BO would also include the possible issuance of an "incidental take" permit. If such authorization is given, the project proponent must provide the USFWS with a Habitat Conservation Plan (HCP) for the affected species and publish notification of the application for a permit in the Federal Register.

Section 4(a)(3) and (b)(2) of the FESA requires the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the

economic impacts of any designations. Critical habitat is defined in section 3(5)(A) of the FESA as (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection, and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds; the act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" (16 USC 703). This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and personal property.

Waters of the United States, Including Wetlands

Wetlands are a subset of "waters of the United States" and receive protection under Section 404 of the Clean Water Act (CWA). The term "waters of the U.S." as defined in Code of Federal Regulations (33 CFR 328.3(a); 40 CFR 230.3(s)), includes all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Wetlands are defined by the federal government (CFR, Section 328.3(b), 1991) as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the FCWA, the final authority regarding CWA jurisdiction remains with U.S. Environmental Protection Agency (EPA) (328.3(a)(8) added 58 FR 45035, August 25, 1993. The United State Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the U.S. under Section 404 of the CWA.

Clean Water Act

In accordance with Section 404 of the CWA, the Corps regulates discharge of dredged or fill material into waters of the U.S. Waters of the U.S. and their lateral limits are defined in 33 CFR 328.3(a) and includes navigable waters of the U.S., interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce,

tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Waters of the U.S. are often categorized as "jurisdictional wetlands" (i.e., wetlands over which the Corps exercises jurisdiction under Section 404) and "other waters of the United States" when habitat values and characteristics are being described. "Fill" is defined as any material that replaces any portion of a water of the U.S. with dry land or that changes the bottom elevation of any portion of a water of the U.S. Any activity resulting in the placement of dredged or fill material within waters of the United States requires a permit from Corps. In accordance with Section 401 of the CWA, projects that apply for a Corps permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the proposed project would uphold State of California water quality standards.

3.2 State

California Fish and Game Codes

Section 2080 of the California Fish and Game Code states, "No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission [California Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081 of the Code, the CDFW may authorize individuals or public agencies to import, export, take, or possess, any state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding if: (1) the take is incidental to an otherwise lawful activity; (2) impacts of the authorized take are minimized and fully mitigated; (3) the permit is consistent with any regulations adopted pursuant to any recovery plan for the species; and (4) the applicant ensures adequate funding to implement the measures required by CDFW. The CDFW makes this determination based on available scientific information and considers the ability of the species to survive and reproduce. Due to the potential presence of state-listed rare, threatened, or endangered species on the project site, Sections 2080 and 2081 of the Code were considered in this evaluation.

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities

are proposed in areas inhabited by those species. CDFW has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects.

California Endangered Species Act

Under the California Endangered Species Act (CESA), the CDFW is responsible for maintaining a list of threatened and endangered species, candidate species, and species of special concern (California Fish and Game Code, 2007). Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state listed endangered or threatened species may be present on the project region and determine whether the proposed project would have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species. If there were project-related impacts to species on the CESA threatened and endangered list, they would be considered "significant." Impacts to "species of concern" would be considered "significant" under certain circumstances, discussed below.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the NPPA includes those listed as rare and endangered under the CESA. The NPPA provides limitations on take as follows: "No person will import into this State, or take, possess, or sell within this State" any rare or endangered native plant, except in compliance with provisions of the act. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material. Due to the absence of state-listed rare, threatened, or endangered plant species on the project site, the NPPA was not considered in this evaluation.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, *CEQA Guidelines* Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed by CDFW to be

significant resources and fall under the *CEQA Guidelines* for addressing impacts. Local planning documents such as general plans often identify these resources as well.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

3.3 Local

Los Angeles County Significant Ecological Areas

The Los Angeles County Board of Supervisors designated Significant Ecological Areas (SEAs) in 1981 with the adoption of the Los Angeles County General Plan (County of Los Angeles 1980a). The collection of SEAs together was intended to designate critical components of the biodiversity of Los Angeles County as it was known and understood at that time. The majority of Griffith Park is within Significant Ecological Area (SEA) 37 and the Project site is 70 feet west of and outside of the SEA (see Figure 2). The intent of the SEA regulations is not to preclude development, but to allow controlled development without jeopardizing the biotic diversity of Los Angeles County.

These isolated areas are important for preserving and documenting the geographical variability of vegetation and wildlife that formerly occurred throughout the region. They serve as reservoirs of native species that could be of scientific and economic value in the future. In addition, birds rely on these islands for areas to rest and feed along their north-south migration routes. In the case of Griffith Park, this function is made even greater than might be expected because it serves as a corridor for any gene flow and species movement that may still take place between the Santa Monica and San Gabriel Mountains via the Verdugo Mountains. (County of Los Angeles 1980b)

City of Los Angeles General Plan

Ecologically important areas are generally considered as open space and shall be so designated. The following shall apply:

- (a) To the extant feasible, ecologically important areas shall be kept in a natural state.
- (b) In the event a project is proposed within an ecologically sensitive important area, an EIR shall be prepared.
- (c) The construction of roads through ecologically important areas shall be closely controlled in order to protect these areas.

City of Los Angeles Protected Tree Ordinance

The City of Los Angeles Protected Tree Ordinance (No.177404) protects any of the following Southern California native tree species measuring 4 inches or greater in trunk diameter at 4.5 feet above ground level:

- (a) Oaks trees including valley oak (*Quercus lobata*) and California [coast] live oak (*Quercus agrifolia*), or any other tree of the oak genus indigenous to California but excluding the scrub oak (*Quercus dumosa*)
- (b) Southern California black walnut (Juglans californica var. californica)
- (c) California Sycamore (Platanus racemosa)
- (d) California bay laurel (Umbellularia californica)

These trees are protected from relocation or removal within the city limits. Relocation and removal includes any act that will cause a protected tree to die, including but not limited to acts that inflict damage upon the root system or other parts of the tree by fire, application of toxic substances, operation of equipment or machinery, or by changing the natural grade of the land by excavation or filling within the drip line of the canopy. Any work activities that will either directly (pruning, removal) or indirectly (grade alteration) impact protected trees within their drip line will require a permit to be issued by the Urban Forestry Division.

City of Los Angeles Department of Recreation and Parks Tree Preservation Policy

The RAP's Tree Preservation Policy provides protection to urban forest trees within parks beyond the protections regulated by the City of Los Angeles Tree Preservation Ordinance (City of Los Angeles, 2006). The Tree Preservation Policy regulates protection of Heritage, Special Habitat Value, and Common Park trees. The definitions of each are included below:

- Heritage trees are individual trees of any size or species that are specifically designated as heritage because of their historical, commemorative, or horticultural significance. Heritage trees are protected trees. The Heritage Trees list can be obtained from RAP Griffith Maintenance/Forestry Division. Before a Heritage tree is pruned, damaged, relocated, or removed, recommendations from RAP staff arborists must be obtained. The forestry arborist makes a recommendation to the General Manager for removal. The General Manager or designee must make the final approval before the tree can be removed.
- Special Habitat Value trees are protected trees and include big leaf maple (*Acer* macrophyllum), boxelder (*Acer negundo*), toyon (*Heteromeles arbutifolia*), California walnut (*Juglans californica*), northern California black walnut (*Juglans hindsii*), California sycamore (*Platanus racemosa*), hollyleaf cherry (*Prunus ilicifolia*), Catalina cherry (*Prunus lyonii*), Fremont cottonwood (*Populus fremontii*), black cottonwood (*Populus trichocarpa*), sandbar willow (*Salix exigua*), red willow (*Salix laevigata*), pacific willow (*Salix lasiandra*), arroyo willow (*Salix lasiolepis*), and California bay (*Umbellularia californica*).

• Common Park Trees provide aesthetic, sentimental, economical, and environmental value. Every tree in City of Los Angeles parks is recognized as a valuable asset and must be protected. The Forestry Arborist may recommend removal.

The RAP Tree Preservation Policy requires that RAP Arborists provide recommendations before any heritage, special habitat value, or common park tree can be removed, relocated, or pruned. Requests to remove, relocate, or prune protected trees must be submitted to the Forestry Division. Pruning must be in compliance with International Society of Arboriculture (ISA) tree pruning guidelines and under the supervision of an ISA certified staff member (ISA, 2008).

4. Methods

4.1 Literature Review and Background Investigation

ESA conducted a thorough review of available existing information about the present or prior biological conditions of the project site and of the surrounding area. The following resources were referenced for the analyses of this report:

- CDFW California Natural Diversity Data Base (CNDDB) (CDFW, 2013a);
- CDFW State and federally listed endangered and threatened animals of California (CDFW, 2013b);
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2013);
- National Resources Conservation Service Web Soil Survey Database (NRCS, 2013);
- United States Fish and Wildlife Service (USFWS) Species Reports (USFWS, 2012)
- Topographic imagery and aerial photographs of the Project location and vicinity; and
- Site Reconnaissance conducted by ESA on November 19, 2013.

4.2 Biological Resource Reconnaissance

ESA biologist Matthew South conducted a biological resource field reconnaissance on November 19, 2013 to identify natural resources present within and adjacent to the site (the biological resources study area as shown in Figure 3), including any having a potential to occur based on habitat types and the overall condition of the site. Prior to the reconnaissance, Mr. South queried the California Department of Fish and Wildlife's California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) online inventory within the Burbank United States Geologic Survey (USGS) 7.52Quadrangle and the surrounding eight quads: San Fernando, Sunland, Condor Peak, Van Nuys, Pasadena, Beverly Hills, Hollywood, and Los Angeles. These databases provide a list of recorded occurrences of sensitive plants, animals and sensitive natural communities within each quadrangle, which provides the bases of target species that could potentially be present. During the reconnaissance Mr. South characterized and quantified on-site plant communities (and noted adjacent plant communities and habitats) and documented any wildlife species observed. The information obtained during the reconnaissance

and literature and database reviews were used to determine the potential for sensitive biological resources to occur within the Project site.

5. Environmental Setting

The Project site is located within Griffith Park at the eastern edge of the Santa Monica Mountains, in the City of Los Angeles, California. The approximately 4,300 acre Griffith Park is surrounded by commercial and residential developments and is one of the largest municipal parks and urban wilderness areas within the United States. Griffith Park is bounded to the east by I-5 and the City of Glendale and extensive commercial and residential development beyond; to the north by SR 134; beyond which is urban development; to the south by Los Feliz Boulevard, Hollywood Reservoir, and Hollywood Freeway (Highway 101); and to the west by Universal City and Highway 101, beyond which is the eastern extent of the Santa Monica Mountains. Griffith Park is situated within Sections 26, 27, 34, 35, Townships 1N and 1S, Range 14W within the USGS Hollywood and Burbank 7.5' series quadrangle maps.

5.1 Climate

The climate of Griffith Park is generally arid, with an average of 16.43 inches of rain per year recorded near Griffith Park (WRCC, 2013). The average annual maximum temperature recorded near Griffith Park is 76.4° F, with an average annual minimum temperature of 49.2° F (WRCC, 2013).

5.2 Soils

Soils on the Project site are excessively drained to well drained, more than 48 inches in depth, with moderate in clay content, and moderately to highly permeable (NRCS, 2013). With the arid climatic regime of the region, these soils generally lack substantial amounts of organic material. Descriptions of the primary soil types found within the Project site is discussed below and each soil type is depicted on **Figure 4**.

Upper Los Angeles River

Upper Los Angeles River soil is composed of a brown to light-brown materials with a texture ranging from sandy loam to a loam, the greater part being a sandy loam. The depth varies from less than a foot to six or more feet; average is two to three feet.

Yolo Loam

Yolo soils are on nearly level to moderately sloping alluvial fans. The soils formed in fine-loamy alluvium derived from sedimentary formations. Yolo loam occurs from near sea level to 2,400 feet. These soils are of moderate to high natural fertility and typically support wildlife and vegetation. Yolo loam is well drained with medium runoff and medium permeability levels.



5.3 Topography

In general, the topography of the Project site slopes upwards from the eastern edge to the western edge as depicted in the topographic map in **Figure 5**. The slope is gradual along the lower picnic area in the northeastern portion of the Project site and is steeper on the lawn area in the southwestern portion of the Project site. The area between the lawn and the lower picnic area (where the new ADA path is proposed) is the steepest area of the Project site.

5.4 Jurisdictional Drainages

Storm water on the Project site generally flows on the surface during rain events as sheet flow in an easterly direction, because of the downward sloping elevation change on the site. A concrete drainage approximately 15 feet long originates from the existing restroom facility and extends downslope to the northeast where it terminates at a walking path within the Project site. This drainage ditch channels storm flows during rain events and, was constructed to reduce soil erosion.

Approximately 100 feet to the northwest of the proposed stage location is a USGS mapped blueline stream. This water course originates to the west in Griffith Park and consists of two separate drainages that converge as one to the west of the Project as shown in Figure 3. Beginning from the point where the two drainages converge, the channel has been modified with large boulders that were likely placed to dissipate water within the channel and to control downstream erosion. As shown in Figure 3, this boulder-lined channel ends between the Old Zoo parking area (Bee Rock Trail shortcut) and the lawn area where the stage is proposed. The channel terminates before reaching the Project site approximately 15 feet to the west of the parking area that is proposed to be repaved. After the termination of the boulder-lined channel, water dissipates as sheet flow along the existing walking paths, picnic areas, and parking areas located in the eastern portion of the Project site as shown in the representative photos provided below. These sheet flows dissipate in disturbed areas. The USGS mapped blue line stream that is located to the west of the Project site may be under the jurisdiction of CDFW. Photographs 1 through 5 depict the areas described above where sheet flow occurs, as well as the boulder-lined USGS mapped blue line stream and the drainage ditch.





Photo 1: Facing west at the USGS mapped intermittent stream located 15 feet to the west of the Project site. Photo was taken from the east of Project boundary, just north of the existing restroom facility. This Photo depicts the boulders placed into the channel that help dissipate season flows before they sheet flow to the east.



Photo 2: Facing southwest at the drainage located below the restroom building. This drainage appears to be in place to prevent erosion, and to channel water before it sheet flows to the east where it eventually dissipates.



Photo 3: Photo was taken at eastern edge of Project site facing west and depicts a pattern of sheet flows from the USGS mapped intermittent stream to the west across the lower picnic areas. This photo was taken shortly after a small rain event.



Photo 4: Facing southwest near the proposed ADA Bridge. This photo depicts a pattern of sheet flows from the southwest that dissipate near the lower picnic area.



Photo 5: Facing north from the walking path proposed for resurfacing and where the ADA Bridge will be located. This photo depicts a pattern of sheet flows that occurred during a recent rain event.

There are no drainages on the Project site that are waters of the U.S. since there is no defined bed or bank or ordinary high water mark as defined by the Corps, and most importantly, no nexus to a Traditional Navigable Water (TNW). Landscaping and disturbed/developed areas characterize the vegetation and cover types around these drainages; therefore, no wetland indicator plant species are present on the Project site.

5.5 Plant Communities and Cover Types

Plant communities are assemblages of plant species that co-occur together within similar environmental conditions. They are defined by species composition and relative abundance. Plant communities within and surrounding the Project site were mapped according to *A Manual of California Vegetation* (Sawyer and Keeler-Wolf, 2009). The distribution of plant communities on the Project site is shown in **Figure 6**.

No natural plant communities are found within the limits of the Project site, which includes the proposed stage area, the trail and road improvements, restroom improvements, and the utility line undergrounding. However, native trees, such as coast live oak and California sycamore, which may be relics from a natural community that once existed prior to development of the walkways and park, are interspersed throughout the Project area. Landscaped areas that consist of both native and non-native plant material and developed areas occur within the Project site.

Coast Live Oak Woodland and Southern Sycamore Alder Riparian Woodland exists in the immediate area, just outside of the Project limits. The landscaped areas and Coast Live Oak Woodland are discussed below. The Southern Sycamore Alder Riparian Woodland is discussed below in Section 5.8, "Sensitive natural Communities."



Griffith Park Performing Arts Center . 130367.02 Figure 6 Plant Communities

Landscaped Areas

Project components occur on roughly 0.151 acres of landscaped areas comprised of various native and non-native plant materials, which is the dominant vegetation community on the Project site. Landscaped areas generally exist within the parkways and various portions of Griffith Park that are available for public use. A high diversity of tree species is found within the landscaped areas, as well as the maintained lawn where the new stage is proposed. Typical species noted in the landscaping that are native to California include California sycamore (*Platanus racemosa*), toyon (*Heteromeles arbutifolia*), California bay (*Umbellularia californica*), and coast live oak (*Quercus agrifolia*). Non-natives trees that were noted within the landscaping include the red river gum (*Eucalyptus camaldulensis*) and Peruvian pepper tree (*Schinus molle*). It should be noted that dozens of other ornamental shrub and tree species are present within the landscaped areas that are on and within proximity to the Project site. The proposed location of the new stage is depicted in **Photo 6** below, which also shows the landscaped areas on the Project site that are described above.



Photo 6: Photo was taken east of proposed stage area facing west and depicts the lawn area with California sycamore trees (left background).

Developed Areas

Developed areas are primarily associated with existing facilities such as parking lots, walking paths, picnic areas, and paved and unpaved access roads (Figure 5). The proposed Project components would occur on 1.43 acres of areas that are already developed, which includes the landscaped areas. Developed areas generally are lacking vegetation and consist of impermeable and permeable surfaces. **Photo 7** below depicts the proposed location of the ADA path, which is currently an asphalt walkway on the Project site and is an example of a developed area on the Project site.



Photo 7: Facing northeast at existing walking path where the proposed ADA pathway would be constructed. Disturbed coast live oak woodland can be seen on the left in this photo and natural coast live oak woodland is located on the right of the paved pathway.

Coast Live Oak series

Coast Live Oak series is an oak woodland dominated by coast live oak trees (*Quercus agrifolia*), and is typically associated with mesic soils on north facing slopes and canyon bottoms. This plant community exists in dense stands surrounding the Project site, primarily along existing walkways as well as adjacent to the USGS mapped intermittent stream that is located just south of Griffith Park Road (see Figure 3). Other species observed in this plant community include toyon and laurel sumac (*Malosma laurina*) and the understory is mostly bare ground with leaf litter having few scattered grasses and forbs.

Disturbed Coast Live Oak Woodland

Disturbed Coast Live Oak exists in areas around the Project site where disturbances have occurred, such as parking areas, walkways, and access roads. Phase 2 of the proposed Project will occur in disturbed coast live oak woodland areas, including the installation of lighting along the walking paths. As shown in Figure 6, this community occurs surrounding the existing walking paths in the eastern half of the Project site that will be resurfaced during Phase 2 of the Project. Picnic tables are scattered throughout this community. The community is characterized by a tall (>30 feet) tree canopy that is mostly closed, shading the understory. Co-dominant tree species found in this community are California sycamore and red river gum; however, coast live oak is the dominant species in this community. Currently the groundcover in this community is mostly bare ground with few herbaceous species present.

5.6 Special-Status Plant Species

Special-status plants are defined as those plants that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status species include:

- Plants listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Plants that meet the definitions of rare or endangered under CEQA Guidelines Section 15380.
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (List 1A, 1B and 2 plants) in California;
- Plants listed by the CNPS as plants in which more information is needed to determine their status and plants of limited distribution (List 3 and 4 plants);
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.);

• Plants covered under an adopted NCCP/HCP;

A review of the CNDDB and/or the CNPS Online Inventory of Rare and Endangered Plants found 35 special-status plant species recorded within a nine-quad search surrounding the Project site (**Figure 7**). Cooper (2010) recorded an additional seven special-status plant species in the vicinity of the Project site during surveys conducted in Griffith Park (**Figure 8**). The potential for special-status plant species to occur is based on proximity to previously recorded occurrences, onsite vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges.

No habitat for special-status plant species occurs on the Project site because the Project site lacks native plant communities, is disturbed, and the overall conditions and habitats on the site are not suitable for supporting any of the special-status plants that have been recorded in the area. Special-status plant species known to occur (based on database searches and literature review) in coast live oak woodland habitats have the potential to occur in the areas surrounding the Project site, but would not be impacted by the proposed Project. **Table 1** below lists the special-status plant species that have the potential to occur in the native oak woodland habitats surrounding the Project site.



Source: California Natural Diversity Database (CNDDB); Griffith Park Rare Plant Survey, May 2010. Griffith Park Performing Arts Center . 130367.02 Figure 7 CNDDB Special Status Plant Species Occurrences 9 USGS Quad Search Area



Source: California Natural Diversity Database (CNDDB); Griffith Park Rare Plant Survey, May 2010. Griffith Park Performing Arts Center . 130367.02 Figure 8 Griffith Park Plant Occurences

Status/CNPS Elevation Flowering Species Rank **Growth Habit** (m) Habitat Period Berberis nevinii FE,SE/1B.1 274-825 Chprl,CoSr,CMwld Evergreen March-June Nevin's barberry shrub California macrophylla -/1B.1 Annual herb 15-1200 CMwld, VFG March-May round-leaved filaree Calochortus catalinae -/4.2 Perennial 15-700 Chprl, CMwld, February-June Catalina mariposa lily bulbiferous CoSr, VFG herb Calochortus Perennial Chprl, CMwld, -/4.2 100-1700 May-June bulbiferous CoSr, LMCF, VFG plummerae Plummer's mariposa herb lily Camissoniopsis lewisii -/3 Annual herb 0-300 CoBISr, CMwld, March-June Lewis' evening-CoD, CoSr, VFG primrose Chorizanthe parryi var. Chprl, VFG, -/1B.1 Annual herb 275-1200 April-June parryi CMwld, CoSr, Parry's spineflower (opening) Horkelia cuneata ssp. -/1B.1 Perennial herb 70-810 Chprl,CoSr,CMwld Februarypuperula September Mesa horkelia Imperata brevifolia -/2B.1 Perennial 0-1250 CoSr, Chprl, September-May California satintail MoDeSr, MeSe, rhizomatous RiSr herb Lilium humboldtii ssp. -/4.2 Perennial 90-1280 Openings, Chprl, May-July CMwld, LMCF humboldtii bulbiferous Humboldt lily herb Malacothamnus Perennial Chprl,CoSr,CMwld, -/1B.2 185-855 June-January davidsonii deciduous RiŴld Davidson's bushshrub mallow Pseudognaphalium -/2B.2 Chprl, CMwld, Perennial herb 50-790 July-December leucocephalum CoSr, RiWld white rabbit-tobacco Symphyotrichum -/1B.2 Perennial 2-2040 CMwld, CoSr, July-November defoliatum rhizomatous LMCF, MeSe, San Bernardino aster herb MaSw, VFG -/1B.3 Perennial BrUF. Chorl. Symphyotrichum 300-2010 June-October greatae CMwld, LMCF, rhizomatous RiWld Greata's aster herb Federal Status CNPS Status Rank 1B = Plants Rare, Threatened, or Endangered in California FE = Federally Endangered and elsewhere Rank 2B = Plants Rare, Threatened, or Endangered in California <u>State Status</u> SE = State Endangered but not elsewhere

TABLE 1 SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR IN WOODLANDS SURROUNDING PROJECT SITE

> Rank 3 = Plants about which more information is needed Rank 4 = Plants of limited distribution - a watch list Threat ranks 0.1 = seriously threatened in California 0.2 = moderately threatened in California 0.3 = not very threatened in California

<u>Habitat</u>

BrUF = Broadleafed Upland Forest, Chprl = Chaparral, , CMWId = Cismontane Woodland, CoScr = Coastal Scrub, LMCF = Lower Montane Coniferous Forest, MaSw = Marshes and Swamps, MeSE = Meadows and Seeps, RiSr = Riparian Scrub, RiWld = Riparian Woodland, VFG = Valley and Foothill Grasslands,

5.7 Wildlife

Wildlife species expected to occur within the woodland habitats near the Project site are typical for the coastal range foothills. Reptile species common to the area include western whiptail (*Aspidoscelis tigris*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), gopher snake (*Pituophis catenifer*), coachwhip (*Masticophis flagellum*), and western diamondback (*Crotalus atrox*). Mammal species typically found in Griffith Park within or adjacent to the Project site include California ground squirrel (*Spermophilus beechyi*), Audubon's cottontail (*Sylivagus audubonii*), mule deer (*Odocoileus hemionus*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*). . The only non-avian wildlife species observed on the Project site during the reconnaissance was an eastern fox squirrel (*Sciuris niger*).

Bird species observed on the Project site during the reconnaissance include California towhee (*Melozone crissalis*), Anna's hummingbird (*Calypte anna*), Acorn woodpecker (*Melonerpes formacivoris*), yellow-rumped warbler (*Dendroica coronata*), hermit thrush (*Catharus guttatus*), common raven (*Corvus corax*), oak titmouse (*Baeolophus inornatus*), black phoebe (*Sayornis nigricans*), red tailed hawk (*Buteo jamaicensis*), and wrentit (*Chamaea fasciata*); however, dozens of other resident and migratory bird species are expected to occur within the Project area as well. It is expected that numerous bird species use the Project site and surrounding areas for nesting and/or foraging. An abandoned raptor nest was observed during the reconnaissance in a California sycamore tree near the proposed ADA ramp on the Project site.

5.6.1 Special-Status Wildlife Species

Special-status wildlife are defined as those animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status wildlife includes:

- Wildlife listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Wildlife that meet the definitions of rare or endangered under *CEQA Guidelines* Section 15380.
- Wildlife covered under an adopted NCCP/HCP;
- Wildlife designated by CDFW as species of special concern;
- Wildlife "fully protected" in California (California Fish and Game Code Sections 3511, 4700, and 5050); and
- Wildlife protected by the Migratory Bird Treaty Act (MTBA).

A review of the most recent CNDDB records for the Project site found 24 special-status wildlife species previously recorded within the nine-quad search area as displayed in **Figure 9** below. The potential for special-status wildlife species to occur on the Project site is based on the proximity to these previously recorded occurrences, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges. Many of these species have potential to occur in the woodland areas located in the vicinity of the Project site. **Table 2** below shows the federal and state regulatory status, preferred habitat, and probability of occurrence in the Project area for each special-status wildlife species known to occur in the 9 quads surrounding the Project.

The "Potential for Occurrence" category provided in Table 2 is defined as follows:

- **Unlikely:** The study site and/or immediate vicinity do not support suitable habitat for a particular species, and therefore the project is unlikely to impact this species.
- **Low Potential:** The study site and/or immediate vicinity only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- **Medium Potential:** The study site and/or immediate vicinity provide suitable habitat for a particular species, and proposed development may impact this species.
- **High Potential:** The study site and/or immediate vicinity provide ideal habitat conditions for a particular species and/or known populations occur in the immediate area.
- **Present:** The species was observed on the site during a reconnaissance conducted by ESA in 2013.

Based on these factors, seven special-status wildlife species were determined to have a high or medium potential to occur on, or in the vicinity of the study site. These species include silvery legless lizard (*Anniella pulchra pulchra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phyrnosoma blainvilli*), western Mastiff bat (*Eumops perotis californicus*), silver haired bat (*Lasionycteris notivagans*), hoary bat (*Lasiurus cinereus*), and western yellow bat (*Lasiurus xanthinus*).



Source: California Natural Diversity Database (CNDDB); Cahuenga Peak Biological Inventory, May 2009..

Figure 9 CNDDB Special Status Wildlife Species Occurrences 9 USGS Quad Search Area

 TABLE 2

 SPECIAL-STATUS WILDLIFE SPECIES DOCUMENTED IN PROJECT AREA

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence in Study Site
Invertebrates			
Monarch butterfly (Danaus plexippus)	-/-	Overwinters along the Central and Southern California Coast, typically in large tree groves near the coast that provide shelter from the elements.	Low: Although large trees occur on the Project site and in the surrounding areas, this species typically prefers to roost closer to the coast. The closest known occurrence is in Santa Monica, CA.
Fish			
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT/SSC	South coast flowing waters. Prefers small to medium streams with higher gradients, clear water, and coarse substrates.	None: Suitable habitat is not present on or surrounding the Project site.
Arroyo chub (<i>Gila orcuttii</i>)	-/SSC	South coast flowing streams. Adapted to hypoxic conditions and large temperature fluctuations.	None: Suitable habitat is not present on or surrounding the Project site.
Santa Ana speckled dace (<i>Rhynicthys osculus spp</i> <i>robustus)</i>	-/SSC	Prefers habitat that includes clear, well oxygenated water, with movement due to a current or waves. In addition the fish thrive in areas with deep cover or overhead protection from vegetation or woody debris. Speckled dace predominantly occupy small streams of the second to third order where they feed and forage for aquatic insects.	None: Suitable habitat is not present on or surrounding the Project site.
Amphibians			
Western spadefoot (<i>Spea hammondiî</i>)	-/SSC	The western spadefoot is primarily a species of the lowlands, frequenting washes, floodplains of rivers, alluvial fans, playas, and alkali flats, but also ranges into the foothills and mountain valleys. It prefers areas of open vegetation and short grasses where the soil is sandy or gravelly (Stebbins, 1985).	None: Suitable habitat is not present on or surrounding the Project site.
Coast range newt (<i>Taricha torosa</i>)	-/SSC	Chaparral, oak woodland, and grasslands. Requires ponds, reservoirs, and sluggish pools in streams for breeding,	Unlikely: Although oak woodland surrounds the Project site, suitable breeding habitat (sluggish pools) Is not provided by the stream north of the Project site.
Reptiles			
Silvery legless lizard (Anniella pulchra pulchra)	-/SSC	Occurs in moist warm loose soil with plant cover. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine- oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas often indicate suitable habitat. Occurs from sea level to around 5,900 ft.	Medium: Suitable habitat is present within the oak woodland surrounding the Project site, particularly where there is a layer of leaf litter present.

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence in Study Site
Coastal whiptail (Aspidoscelis tigris stejnegeri)	-/SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Medium: Suitable habitat is present within the oak woodland surrounding the Project site.
Western pond turtle (<i>Emy marmorata</i>)	-/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter.	None: Suitable habitat is not present on or surrounding the Project site.
Coast horned lizard (<i>Phyrnosoma blainvillii</i>)	-/SSC	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains from sea level to 8,000 ft. (2,438 m) in elevation. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near their primary food source harvester ant hills.	Medium: Suitable habitat is present within the oak woodland surrounding the Project site.
two-striped garter snake (<i>Thamnophis</i> <i>hammondii</i>)	None/SSC	Marshes, meadows, sloughs, ponds, and slow-moving water courses.	None: Suitable habitat is not present on or surrounding the Project site.
Birds			
Burrowing owl (<i>Athene cunicularia</i>)	-/SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel.	Unlikely: the Project site lacks the expanse of open habitat and burrowing mammals needed for this species to occur.
Southwestern willow flycatcher (Empidonax traillii extimus)	FE/SE	Prefers dense vegetation throughout all vegetation layers present in riparian areas. Prefers nesting over or in the immediate vicinity of standing water.	Unlikely: Suitable habitat is not present on or surrounding the Project site.
American peregrine falcon (<i>Falco peregrinus anatum</i>)	FD/SD, FP	Primarily occurs near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Unlikely: Suitable habitat is not present on or surrounding the Project site.
Coastal California gnatcatcher (<i>Polioptila californica</i> <i>californica</i>)	FT/SSC	Open sage scrub with California sagebrush as a dominant or co-dominant species. Nest placement typically in areas with less than 40 percent slope gradient. Gullies and drainages, when available within territory, used as nest sites. Use proportional to shrub species availability: typically California sagebrush, California buckwheat, California sunflower (<i>Encilia californica</i>), broom baccharis (<i>Baccharis sarothroides</i>), and laurel sumac.	Unlikely: Suitable habitat is not present on or surrounding the Project site.

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence in Study Site
least Bell's vireo	FE/SE	Prefers dense, low, shrubby vegetation, generally within	Unlikely: No suitable habitat is present on the Project site.
(Vireo bellii pusillus)		early successional stages in riparian areas with a dominance of willows (<i>Salix</i> spp.)	The nearest recorded occurrence is at the native portions of the Los Angeles River containing riparian habitat located to the east of Griffith Park.
Mammals			
Western Mastiff bat (<i>Eumops perotis</i> californicus)	-/SSC	Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	High (foraging): Suitable foraging habitat is present within the oak woodland surrounding the project site. No sign of roosting was evident within the trees located on the Project site during the site reconnaissance.
Silver haired bat (<i>Lasionycteris</i> notivagans)	WBWG	A solitary, tree-roosting species that is common in forested areas. The species typically hibernates in small tree hollows, beneath sections of tree bark, in buildings, rock crevices, in wood piles, and on cliff faces.	High (foraging): Suitable foraging habitat is present within the oak woodland surrounding the proposed project. No sign of roosting was evident within the trees located on the Project site during the site reconnaissance.
Hoary bat (<i>Lasiurus cinereus</i>)	WBWG	A solitary species that utilizes diverse forest habitats that contain a mixture of forest and small openings that provide edge habitat. Roosting sites include squirrel nests, woodpecker holes, and out in the open on the trunks of trees, Both breeding and solitary adults prefer older trees for roosting 11.5 to 40 feet above the ground. Roosting preferences include dense vegetation above with unobstructed space below, allowing bats to drop to gain flight and no potential perches beneath, which could aid detection by birds or other animals. Dark-colored ground cover is preferred	High (foraging): Suitable foraging habitat is present within the oak woodland surrounding the project site. No sign of roosting was evident within the trees located on the Project site during the site reconnaissance.
Western yellow bat (<i>Lasiurus xanthinus</i>)	-/SSC	Species occurs in a variety of habitats including riparian, arid scrublands and deserts, and forests. The species roosts singly or in groups of up to 15 in trees including <i>Populus fremontii, Quercus agrifolia</i> , and the frond skirts of <i>Washingtonia</i> palms.	High (foraging): Suitable foraging habitat is present within the oak woodland surrounding the Project site. No sign of roosting was evident within the trees located on the site during the site reconnaissance.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	-/SSC	Often occurs in open or semi-open areas, typically in grasslands, agricultural fields, or open coastal scrub habitats.	Unlikely: Suitable habitat is not present on or surrounding the Project site.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	-/SSC	Occurs in arid, open or semi-open areas, typically in chaparral, desert scrub, or sagebrush scrub.	Unlikely: Suitable habitat is not present on or surrounding the Project site.

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence in Study Site	
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	-/SSC	A migratory species that forms maternity colonies in rock crevices and caves that are typically used long term.	Unlikely: Suitable foraging habitat exists within one mile of the Project site but no roosting or maternity caves occur in the visibility for this provide	
		Big free-tailed bats roost mainly in crevices and rocks in cliff situations, with occasional roosts occurring in buildings, caves, and tree cavities.	the vicinity for this species.	
American badger (<i>Taxidea taxus</i>)	-/ SSC	Most abundant in drier, open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires open, uncultivated ground and sufficient burrowing rodent prey.	Unlikley: Suitable habitat is not present within the vicinity of the Project site. The Urban area around Griffith Park limits the foraging ability of this wide ranging species.	

Definitions

1. Federal status: USFWS Listing, other non-CA specific listing

FE = Listed as endangered under the federal Endangered Species Act (ESA)

FT = Listed as threatened under ESA

FD = Delisted in accordance with the ESA

2. State status: CDFG Listing

 $\begin{array}{l} {\sf SE} = {\sf Listed} \mbox{ as endangered under the California Endangered Species Act (CESA)} \\ {\sf ST} = {\sf Listed} \mbox{ as threatened under the CESA} \\ {\sf SC} = {\sf Candidate for listing (threatened or endangered) under CESA} \end{array}$

SD = Delisted in accordance with the CESA

SSC = Species of Special Concern as identified by the CDFG

FP = Listed as fully protected under CDFG code

3. Other status:

WBWG = Listing by the Western Bat Working Group

5.8 Sensitive Natural Communities

Sensitive natural communities are those that are considered by the CDFW to be imperiled due to their decline in the region and/or their ability to support special-status plant and/or wildlife species. These communities include those that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. Loss of sensitive natural communities also can remove or reduce important ecosystem functions, such as water filtration by wetlands or bank stabilization by riparian woodlands.

A review of the most recent CNDDB (CDFW, 2013) records revealed a full list of sensitive natural communities known to occur on the Project site and in the vicinity (see **Figure 10** below). Details of these natural communities are provided in **Table 3** below. One sensitive natural community, Southern Sycamore Alder Riparian Woodland was recorded to the CNDDB within and surrounding the Project site.

Southern Sycamore Alder Riparian Woodland

CDFW describes Southern Sycamore Alder Riparian Woodland as a tall, open, broad-leaved, winter-deciduous streamside woodland dominated by California sycamore stands that seldom form closed canopy forests, and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. This natural community does not occur on the Project site, but occurs along the stream in Spring Canyon 15 feet west of the Old Zoo Parking area, outside of the Project footprint (see Figure 6). The plants in this natural community are characterized by Sawyer and Keeler-Wolf (2009) as Coast Live Oak series. **Photo 8** below depicts the Southern Sycamore Alder Riparian Woodland to the west of the Old Zoo Parking area (See Figure 6).



Photo 8: Facing southeast along the road that extends beyond the Old Zoo parking area beyond the western limits of the Project site. This photo depicts the Southern Sycamore Alder Riparian Woodland that is located to the north and west of the Project (see Figure 6).



Source: California Natural Diversity Database (CNDDB); Cahuenga Peak Biological Inventory, May 2009.. Griffith Park Performing Arts Center . 130367.02 Figure 10 CNDDB Special Status Natural Communities 9 USGS Quad Search Area

TABLE 3 SENSITIVE NATURAL COMMUNITIES

Community Name	CNDDB Element Rank: Global/State	Community Description	Presence within Study site
California Walnut Woodland		Typically an open-canopied woodland community dominated by California walnut. Understory consists primarily of grasses and forbes. This community is typically found on relatively moist, fine-textured soils of valley slopes and bottoms, as well as rocky outcrops. On drier, rockier sites often surrounded by coastal sage scrub; on more mesic sites intergrades with coast live oak communities (Holland 1986)	Not Present. Study site does not support characteristic species or habitats of the community.
Riversidian Alluvial Fan Sage Scrub	G1/S1.1	Scrub community found on alluvial fans that experience infrequent but severe flood events. It typically is found on course particles river wash soils near the flood channels or in areas that are frequently inundated. Soils supporting alluvial scrub drain rapidly, have slow runoff, and contain low amounts of organic matter. It is made up predominantly of drought tolerant soft-leaved shrubs, but includes a significant number of larger perennial species typically found in chaparral in its mature phases.	Not Present. Study site does not support characteristic species or habitats of the community.
Southern California Arroyo Chub/Santa Ana Sucker Stream	G?/SNR	Characterized by warm, muddy, slow moving waters of the Los Angeles, upper Santa Clara River system and the San Louis Rey and Santa Margarita river systems of San Diego County.	Not Present. Study site does not support characteristic species or habitats of the community.
Southern Coast Live Oak Riparian Forest	G4/S4	Open to locally dense evergreen sclerophyllous riparian woodlands dominated by coast live oak (<i>Quercus agrifolia</i>). This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Similar to and questionably distinct from Central Coast Live Oak Riparian Forest.	Not Present. The Coast Live Oak series plant community surrounding the Project site more closely resembles the Southern Sycamore Alder Riparian Woodland sensitive natural community.
Southern Cottonwood Willow Riparian Forest	G3/S3.2	Tall, open, broadleafed winter-deciduous riparian forests dominated by <i>Populus</i> species, and several tree willows. Similar to Central Coast Cottonwood-Sycamore Riparian Forest, although apparently with less coast live oak or <i>Alnus</i> species. Understories usually are dominated by shrubby willows.	Not Present. Study site does not support characteristic species or habitats of the community.
Southern Mixed Riparian Forest	G2/S2.1	Similar to Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Coast Live Oak Riparian Forest, except does not show that species dominance characteristic of these communities, but rather a heterogeneous mixture of common riparian tree species.	Not Present. Study site does not support characteristic species or habitats of the community.
Southern Sycamore Alder Riparian Woodland	G4/S4	A tall, open, broadleafed, winter-deciduous streamside woodland dominated by Western sycamore (Platanus racemosa). These stands seldom form closed canopy forests, and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. This habitat type is similar to Sycamore Alluvial Woodland.	Present. The Coast Live Oak series on the Project site surrounding the stream in Spring canyon has the characteristics of this natural community.

Global Ranking

The global rank (G-rank) is a reflection of the overall condition of an element throughout its global range

G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres.

G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres.

G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres.

G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.

G? = Inexact numeric rank.

State Ranking

The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

S1 = Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres

S1.1 = very threatened

S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres S2.1 = very threatened

S3 = 21-80 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres

S3.2 = threatened

S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT RANK. SNR = National, sub-national, or State conservation status not yet assessed.

5.9 Connectivity and Migration Corridors

Habitat linkages are contiguous areas of open space that connect two larger habitat areas. Linkages provide for both diffusion and dispersal for a variety of species within the landscape. In addition, linkages can serve as primary habitat for some smaller species. Corridors are linear linkages between two or more habitat patches. Corridors provide for movement and dispersal, but do not necessarily include habitat capable of supporting all life history requirements of a species (Cooper, 2008).

Griffith Park has become increasingly isolated from the rest of the Santa Monica Mountain Range, the Los Angeles River, and the low elevation habitat remnants within the Los Angeles basin, due to construction of SR-134, I-5, and Highway 101; the channelization of the Los Angeles River and its tributaries; as well as the intensive urbanization that surrounds the park. In addition, the Project site is within an active use area that has seen a lot of historical use (from the Old Zoo). Although some species have disappeared from the landscape, midsize mammals with large home ranges such as the coyote, gray fox, and mule deer still maintain populations within the park. Additionally, the Pacific Flyway, a large migration route used by numerous bird species that pass throughout large portions of California, is within the vicinity of the Project area. Terrestrial migratory birds such as warblers and sparrows have the potential to be present in the vicinity of the Project site during spring and fall migration periods.

Locally, wildlife is expected to utilize the USGS mapped blue lined stream west of the Project site in Spring Canyon as a local movement corridor between vegetated areas within Griffith Park. The landscaped and developed areas of the site do not provide good wildlife movement opportunities due to the lack of dense vegetated areas, presence of human activity, and the exposure to predators such as raptors. However, this is not to say that common wildlife do not pass through the Project site, especially during nighttime.

5.10 Protected Trees

Protected native trees occur throughout the landscaped and disturbed areas on the Project site and within the woodland areas that are adjacent. Coast live oak, California sycamore, and California bay trees are protected by the Los Angeles Protected Tree Ordinance (City of Los Angeles, 2006) and all of these species are on the Project site. These species are also protected in accordance with the RAP Tree Preservation Policy as either Special Habitat Value trees (California sycamore, toyon, and California bay trees) or as Common Park trees (all other trees on the Project site). A California sycamore tree and a red river gum tree is located near the proposed stage that may be impacted during construction and is identified in Figure 3.

6. Impact Analysis

ESA analyzed the potential for the Project to impact sensitive biological resources by examining the existing conditions of the site and determining whether any confirmed or potentially occurring sensitive biological resources could be affected by the construction and operation of the Project. The analysis considered Appendix G of the CEQA Guidelines (i.e., the Initial Study Checklist) to

determine if any significant impacts could occur. Below are the biological resource issues that were considered.

- 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 CDFW or USFWS.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW or USFWS.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

Construction and operation of the Project could impact plants and wildlife in a variety of ways such as mortality from vehicle strikes, trimming and pruning of trees, increased noise and lighting, and disruption of bird nesting behavior, either directly or indirectly. Construction activities could result in direct mortality of wildlife and could directly impact special status species and protected trees. The improper pruning of limbs or disruption of tree roots can impact the health of, or even kill a tree. The construction of the Project is to support existing events on the Project site. However, there is the potential for more events to occur there in the future after the Project is completed. This section analyzes the impacts from both construction of the Project and potential future use of the facilities that will be built.

6.1 Special-Status Species

This section describes the potential impacts to special-status species that may occur in the vicinity of the Project. Particular focus is afforded to those species that have a medium to high potential to occur in the immediate area of the Project site.

6.1.1 Special Status Plants

Special-status plant species such as the mesa horkelia and Plummer's mariposa lily and several others in Table 2 with a habitat preference of oak woodland, may occur within the undisturbed woodland habitat that are adjacent to (but not on) the Project site. These adjacent areas should be avoided during the construction of the Project. Mitigation measures described in Section 7 would reduce potential impacts to special-status plants to a less than significant level.

6.1.2 Coast Horned Lizard, Coastal Whiptail, and Silvery Legless Lizard

According to a biological inventory report prepared for the Trust for Public Land, the coast horned lizard has recently (2009) been confirmed as a rare resident on high ridges of Griffith Park and Cahuenga Peak, where it formerly (until the 1970s) occurred throughout the park's lower slopes and canyons (Cooper, 2009). The coast horned lizard has become extremely rare in the greater Los Angeles metropolitan region, having been extirpated from the entire coastal plain and most of the San Fernando and San Gabriel Valleys. A combination of broad scale habitat modification and the displacement of native harvester ants, its primary food source, by non-native Argentine ants have been implicated in declines within Los Angeles County. It is unlikely that the coast horned lizard occurs in the lower elevations of Griffith Park and suitable habitat for this species is not present within the proposed Project site; therefore, no impacts are expected to occur to this species.

The undisturbed woodland areas located immediately adjacent to the proposed project contains suitable woodland habitat for the coastal whiptail and the silvery legless lizard. However, no direct impacts would likely occur to these adjacent woodland areas. However, because of the proximity of the Project to the undisturbed woodland areas, the potential does exist that the species could pass through the Project site during the construction phase. During mobilization of construction equipment, reptile species within the area would likely disperse due to the presence of such equipment and increased noise level. It should be noted that the current level of disturbance in the vicinity of the Project from urban development and from the existing recreational use of the park is substantial; therefore, the operational phase of the Project is not expected to substantially increase the potential for these species to be impacted compared to the existing conditions of the area. Mitigation measures presented in Section 7 would reduce potential impacts to special status wildlife to a less than significant level.

6.1.3 Bats

Four species of bats including the western mastiff, silver haired, hoary, and western yellow bat were found to have a high potential to utilize the area for foraging. Based on the reconnaissance conducted by ESA, no potential maternity roosts were observed or are expected to occur in close proximity to the Project. The silver haired, hoary, and western yellow bat species roost in a variety of tree species; however, the mature trees located within the limits of the Project are not a part of an intact or dense woodland and several are maintained (i.e., pruned) regularly, which would preclude them from being used as roosting sites. The western mastiff bat is typically considered a cliff-dwelling species, and is known to roost in large maternal colonies, and has a high potential to utilize the site for foraging, but may roost in more undisturbed woodland areas found in Griffith Park. Western mastiff bats will utilize large boulders and buildings as roosting habitat. The species typically forages at a much higher altitude than other species, and is known to range considerable distances from roosting locations during evening foraging; therefore, the potential exists for this species to forage in and around the disturbed woodland areas of the Project site (TDPW, 2013). Additionally, although no presence (i.e., staining or guano) of bat roosting was observed within any of the existing structures in the immediate area and on the

Project site, there is a potential that this species could utilize the existing restroom structure on the site and the Old Zoo infrastructure facilities (i.e. the grottos) surrounding the site as for roosting.

The Project is in an area that currently has a high level of disturbance from urbanization and from the existing Griffith park recreation areas. The future uses that are proposed would not create a new use of the area and the events that would take place will be short in duration and would not displace any bat maternity roosts, since none are expected to occur in close proximity to the project site. Noises generated during nighttime performances could disrupt the feeding of some bat species in the immediate area; however, the project site is not considered an important bat foraging area for bats (no standing water or perennially wet riparian habitats). The Southern Sycamore Alder Riparian Woodland found in Spring Canyon to the west may be used for foraging by bats. However, there are ample amounts of this habitat that extends further west into Spring Canyon that that is more isolated from disturbances. Impacts to foraging bat within the immediate vicinity of the project site would be temporary during nighttime performances. These periodic performances would not cause a bat species population to drop below self-sustaining levels, nor would the operation of the project be considered a significant impact on foraging or breeding bats. Impacts that could occur during construction and operation would be considered less than significant with the implementation of mitigation measures discussed in Section 7.

6.2 Habitat Loss

Ground disturbance would only occur within the landscaped and disturbed/developed areas. No native habitat would be impacted, either directly or indirectly during Project activities; and therefore, the Project would not result in loss of native habitats.

6.3 Jurisdictional Waters

An intermittent USGS mapped blue line stream occurs outside of the project footprint approximately 15 feet west of the segment of the Old Zoo parking area that will be repaved, as well as down slope to the north of the existing restrooms on the Project site.

CDFW requires Notification of Lake or Streambed Alteration (LSAA) if a proposed activity will: (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; (or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. The Project will be constructed and operated in developed/disturbed and landscaped areas exclusively and will not divert or obstruct the stream. In addition, the Project construction and operation will be done away from the streambed and alteration of the bed will not occur. However, construction would include paving with asphalt within areas that could potentially drain to the intermittent stream adjacent to the site. This could result in deposition of materials into the streambed, which would be a significant impact. In addition, hazardous materials associated with construction equipment such as fuels, oils, antifreeze, coolants, and other substances would adversely affect water quality if

inadvertently released to surface waters. Incorporation of BMPs and mitigation measures outlined in Section 7 would minimize the impact to a less than significant level.

6.4 Sensitive Natural Communities

A review of the most recent CNDDB (CDFW, 2013) records revealed a list of sensitive natural communities known to occur in the vicinity of the project site. One sensitive natural community, Southern Sycamore Alder Riparian Woodland was observed to the west of the Project in the vicinity of Spring Canyon. The nearest project feature to the Southern Sycamore Alder Riparian Woodland would be the repaying of the parking lot, which would not result in any impacts to this woodland; therefore, impacts to this sensitive plant community would be less than significant.

6.5 Nesting Birds

A number of resident and seasonal bird species have the potential to nest on the project site in trees and adjacent vegetation. Direct mortality of adult avian species would not likely occur during construction of the Project. However depending on the timing of construction, eggs and nestlings with small, well-hidden nests could be subject to loss, which would result in a violation of the MBTA and Fish and Game Code. Impacts to nesting birds would result primarily through direct and indirect disturbances such as through habitat clearing, earth removal, grading, digging, equipment movement, and noise and vibration. It should be noted that the current level of disturbance in the region of the proposed project from urban development and from the existing recreational use of Griffith Park is substantial; therefore, the operational phase of the proposed project is not expected to substantially increase the potential for these species to be impacted compared to the existing conditions of the area. Implementation of the mitigation measures that are recommended in Section 7 would reduce the potential for injury or mortality of nesting birds during construction through construction timing, establishment of nesting buffers, and a worker environmental training. Therefore, impacts to nesting birds would be less than significant with mitigation.

6.6 Protected Trees

The Project site contains several tree species protected by the City Tree Protection Ordinance and the RAP Tree Preservation Policy, including coast live oak, California sycamore, and California bay laurel. Limbs of trees on the site may need to be trimmed during the construction and operational phases, and grading of the new stage may impact the roots of a California Sycamore, which would be a conflict of these preservation policies. Trimming of limbs or grading under the dripline of trees protected by the City Tree Protection Ordinance and the RAP Tree Preservation Policy may be considered a significant impact. However, such impacts would be reduced to less than significant with implementation of the mitigation measures discussed in Section 7.

6.7 Wildlife Movement Corridors

Locally, wildlife is expected to use the site to move throughout Griffith Park and some terrestrial species may focus their movement within the stream corridor north of the proposed project in Spring Canyon. These species could be deterred from there movement corridors near the Project

site by night lighting. However, the areas within and surrounding the project site that consist of ornamental landscaping and developed areas do not provide a corridor for terrestrial wildlife movement due to the current disturbance of the area and overall presence of humans. With the implementation of the mitigation measures pertaining to project lighting discussed in Section 7 the Project's potential to affects local wildlife movement in the vicinity of the project will be reduced to a less than significant level.

7. Mitigation Measures

ESA developed mitigation measures to reduce each of the Project's impacts to biological resources to a level that is less than significant according to CEQA. Successful mitigation measures are those that are possible, practical, and economically feasible for RAP to implement. Each measure describes actions that RAP can take to avoid, reduce, or minimize Project impacts to biological resources on and surrounding the Project site.

7.1 Worker Environmental Awareness Program

Prior to construction, a Worker Environmental Awareness Program shall be implemented that shall include the following:

• The Project proponent should provide Worker Environmental Awareness Program (WEAP) training to all personnel working on the site during Project construction with a qualified biologist. The training shall include a pre-construction meeting that would review all special-status plants, protected wildlife and protected trees within the Project site to promote their awareness and to review mitigation measures for avoiding impacts, and all responsible parties.

7.2 Special-Status Species

Special-status plant species such as mesa horkelia and Plummer's mariposa lily; and wildlife species such as the coast horned lizard, coastal whiptail, the silvery legless lizard may occur within woodland habitat surrounding the Project site, and special-status bats may forage in the habitats in the immediate area, too. Therefore, the following mitigation measures are required:

- In order to minimize disruption to habitats that are suitable to special-status plants and wildlife, the construction contractor shall utilize existing disturbed areas for construction staging areas and no staging of equipment or vehicle access shall be allowed within the adjacent woodland areas.
- Construction activities shall be minimized to the greatest extent feasible in the construction area to minimize potential impacts to potentially-occurring special status wildlife species.
- Prior to ground disturbing activities, a qualified biologist shall conduct pre-construction clearance surveys. If any ground dwelling species are identified within proposed construction zones, the qualified biologist shall captured and/or move the animal(s) beyond the construction zone in neighboring suitable habitat.

• In the event that a tree roosting bat roost is established in the future, any tree trimming activities associated with the operations of the proposed project shall be conducted during the non-breeding season for hoary and silver-haired bats (March – August). If tree trimming activities need to be conducted during bat breeding season, a qualified biologist shall conduct a bat roost survey to verify that no roosts have established in the affected trees. Tree trimming shall not be allowed if trees have active bat roosts.

7.3 Nesting Birds

A number of resident and seasonal bird species have the potential to nest on the Project site in trees and adjacent vegetation. The following mitigation measures are recommended to reduce potential impacts to nesting birds during construction activities:

- If construction is scheduled to occur during the non-nesting season (September through January 31), no preconstruction surveys or additional measures are needed. If construction or initial site preparation (e.g., excavation, trenching, vegetation clearing, etc) is scheduled to occur during the breeding season (February 1–August 31), a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitats within 500 feet of construction activities. At least one survey should be conducted no more than three days prior to construction activities.
- If active nests are found, no-disturbance buffers shall be implemented around each nest based on the species and location of the nest as determined by a qualified biologist. A general buffer distance generally includes 500-feet around any confirmed active raptor nest and a 300-foot buffer around nests of passerine bird species protected in accordance with the MBTA and/or Fish and Game Code. The buffers should be implemented until it is determined by a qualified wildlife biologist that young have fledged and the nest is determined to be inactive.

7.4 Protected Trees

The presence of protected trees shall be considered during construction activities including grading and excavation of the new stage and temporary equipment staging areas.

- A qualified arborist shall be present to identify and demarcate protected trees within the entire Project site that have the potential to be impacted by construction activities and to assist in guiding construction activities to avoid or minimize impacts to protected trees.
- Situate all project elements including trenching paths on existing access routes or within areas greater than 10 feet from the drip lines of protected trees in order to avoid encroachments into the root systems and any inadvertent impacts.
- If impacts to city protected trees are unavoidable, a qualified arborist shall prepare a tree report that identifies each tree that may be impacted and mitigation measures that shall be implemented in accordance with the city and RAP tree preservation guidelines and policies, respectively. If a protected tree may be impacted, the project proponent shall submit a permit application with the City of Los Angeles Urban Forestry Division. In

such circumstances, a permit shall be obtained prior to performing any project activities that may impact a protected tree.

- In accordance with the RAP Tree Preservation Policy, RAP arborists shall provide recommendations before any heritage, special habitat value, or common park tree can be removed, relocated, or pruned. Requests to remove, relocate, or prune protected trees must be submitted to the city's Forestry Division.
- A tree permit shall be obtained prior to receiving a grading permit for any protected tree that would be removed or encroached in accordance with the City of Los Angeles Protected Tree Ordinance (No.177404) and the City of Los Angeles Department of Recreation and Parks Tree Preservation Policy.

7.5 Drainages

A USGS mapped blue line stream occurs to the west of the Project site. The following mitigation measures are recommended to reduce the potential for contaminants from construction equipment and roadway paving to enter the stream:

- Fiber rolls or other appropriate containment material shall be installed along the boundary of the Old Zoo parking area, between the areas that will be repaved and the drainage area to the south to prevent sediment from leaving the construction area. Construction contractors shall be made aware of the required BMPs during the WEAP training provided in the mitigation measure recommended in Section 7.1. Construction debris and waste materials that are within 100 feet of the creek and not contained shall be collected at the end of each day and properly disposed in trash or recycle bins.
- Drip pans should be placed beneath any machinery engine blocks or hydraulic systems to prevent any leakage from entering into the stream.
- Vehicle fueling shall be conducted a minimum of 500 feet from any water course.
- Any grout waste or spills will be cleaned up immediately and disposed of at an appropriate off site location.
- Spill kits capable of containing hazardous spills will be stored on-site. Required materials will be specified in contractor specifications.

7.6 Night Lighting

- All night lighting shall be directed downward to reduce the effects of light pollution on adjacent areas that may be used by wildlife.
- Lighting should only be operational during night events at the Project facilities and should be turned off during all other times.

8. References

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